



U.S. Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

COMBINED ROUTING AND CONCURRENCE SLIP  
DATE

RE: Newport NH NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

ROUTING TO:

	Name	Initials	Date
1.	Joy Hilton (OES04-3)	JSH	9/18/12
2.	Mike Fedak (OES04-3)	MF	10/2/12
3.	Michael Wagner (OES04-3)	MW	10-3-2012
4.	Susan Studlien (OES04-5)	SS	10/03/12
5.	Wanda Williams (OES04-4)		
	Please date, copy and mail.		

CONCURRENCE:

The signature above signifies concurrence with the following documents:

Letter re: WWTF Phosphorus Removal Upgrade and Whole Effluent Toxicity  
("WET") NPDES Permit Limits Compliance

REMARKS:

Newport's NPDES Permit was reissued on April 18, 2007, became effective on July 1, 2007, and is set to expire on June 30, 2012. The permit includes new stringent effluent limitations for total phosphorus. The Order addresses the documented phosphorus, and acute and chronic whole effluent toxicity limits violations, and the AO requires the Town to achieve full NPDES permit compliance by no later than October 31, 2012. Newport wrote to EPA on September 13, 2012 to request a 60-day extension of the October 31, 2012 deadline. This letter revises the Supplemental Order Schedule for achieving compliance with the Phosphorus limits contained in Newport's NPDES Permit.

Please Return to:

Name	Phone Number
Joy Hilton (SEW)	1877



U.S. Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

COMBINED ROUTING AND CONCURRENCE SLIP  
DATE

*Done*  
*4/5/12*  
*Wanda*

RE: Newport NH NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

ROUTING TO:

	Name	Initials	Date
1.	Joy Hilton (OES04-3)	<i>JH</i>	<i>4/3/12</i>
2.	Mike Fedak (OES04-3)	<i>MF</i>	<i>4/3/12</i>
3.	Michael Wagner (OES04-3)	<i>MW</i>	<i>4/3/12</i>
4.	Susan Studlien (OES04-5)	<i>SS</i>	<i>04/05/12</i>
5.	Wanda Williams (OES04-4) Please date, copy and mail.		

CONCURRENCE:

The signature above signifies concurrence with the following documents:

Letter re: WWTF Phosphorus Removal Upgrade and Whole Effluent Toxicity  
("WET") NPDES Permit Limits Compliance

REMARKS:

Newport's NPDES Permit was reissued on April 18, 2007, became effective on July 1, 2007, and is set to expire on June 30, 2012. The permit includes new stringent effluent limitations for total phosphorus. The Order addresses the documented phosphorus, and acute and chronic whole effluent toxicity limits violations, and the AO requires the Town to achieve full NPDES permit compliance by no later than October 31, 2012.

This letter revises the Supplemental Order Schedule for achieving compliance with WET limits contained in Newport's NPDES Permit.

Please Return to:

Name	Phone Number
Joy Hilton (SEW)	1877



## TOWN OF NEWPORT, N.H.

March 6, 2012

Joy Hilton, Environmental Engineer  
Water Technical Unit (OES04-3)  
U.S. EPA – New England  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

RE: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Town of Newport, NH – Wastewater Treatment Plant

Dear Ms. Hilton:

As you may recall, we recently had discussions in February (telephone conversations on February 10 and February 22, 2012) regarding the Town's status with the Whole Effluent Toxicity (WET) issue as defined in the Town of Newport's Administration Order (AO). In those discussions, I briefly explained the Town's request with regard to the installation of mixers for the lagoons, specifically SolarBee mixers. In retrospect, I believe the Town's request is better defined in correspondence and thus the reason for this letter.

To review the history of the WET issue since the AO, please find the following:

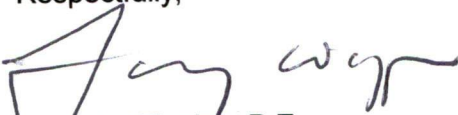
1. AECOM prepared the study "Evaluation of Phosphorus Removal Alternatives, Wastewater Treatment Facility, Newport, NH" in January 2010 stating "...mixing of the lagoons with strategically located surface mixers would create a better treatment environment...". In a later email, Dennis Setzko of AECOM stated the mixers "may" create a better treatment environment.
2. In the EPA's letter to the Town of May 4, 2011, the EPA questioned whether the project would include *mixers to comply with the WET issue*? The Town investigated SolarBee mixer proposals as reported in the Town's quarterly report of October 31, 2011.
3. Subsequent to a meeting with NHDES officials, Steve Roberts (NHDES Design Review) submitted his letter of December 30, 2011 regarding the NHDES's position on SolarBee mixers and the Town's application for CWSRF Program funds. In his letter, Mr. Roberts stated "*the DES remains unconvinced that surface mixers will affect the desired toxicity reduction....*" and *the DES is therefore disinclined to commit limited CWSRF funds toward their purchase*. Steve Roberts' letter was attached to the Town's January 2012 quarterly report.
4. The Town's January 2012 quarterly report to the EPA stated the Town is evaluating its options with regard to the WET issue however subsequently decided to get direction from the EPA.

Reviewing the above history regarding the WET issue, the Town is therefore requesting direction from the EPA regarding: 1) the SolarBee mixer issue and 2) the Town's course of action required to comply with the AO. As I expressed in February, if the Town does not install the mixers, the concern is the EPA might take enforcement action as mixers were "recommended".

I trust this letter expresses the Town's request in a clear and accurate manner and provides sufficient information for the EPA's response.

Thank you in advance for your consideration and response to this letter.

Respectfully,



Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

Cc: P. Brown, Town Manager  
A. Greenleaf, WWTP Supt.  
Tracy Wood, NHDES, Water Engineering Bureau – Compliance, PO Box 95, Concord, NH 03302-0095



## TOWN OF NEWPORT, N.H.

October 31, 2011

OCT 31 2011

Ms. Susan Studien, Director  
Office of Environmental Stewardship  
U.S. Environmental Protection Agency  
Region 1  
5 Post Office Sq., Suite 100  
Boston, MA 02109

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Town of Newport Wastewater Treatment Plant Upgrade  
Quarterly Report

Dear Ms. Studien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade (for the July to September 2011 period).

1. AECOM's Phosphorous Removal Preliminary Design drawings and the Basis of Design Report were received for Town review and comment on September 12, 2011.
2. The Town and AECOM negotiated the Phosphorous Removal Final Design Contract and submitted it to the New Hampshire Department of Environment Services (NHDES) for review and approval on September 8, 2011. The contract was approved by the NHDES on September 12, 2011.
3. AECOM's 50% completion submittal of the Phosphorous Removal Final Design plans, specifications and bid documents were received for Town review and comment on October 25, 2011.
4. The Town and AECOM continue with negotiations on the Phosphorous Removal Construction Services contract.
5. The Phosphorous Removal Final Design Contract included a revised schedule (dated 8/26/2011) for engineering and construction as prepared by AECOM (copy attached).
6. With regard to the Whole Effluent Toxicity (WET) issue, the Town received the TIE test results for August 2011 on September 27, 2011. The test laboratory reported "the test provides information that ammonia may be a contributing factor in causing toxicity, however, interactions with other unidentified toxicants may also be affecting organism responses." With regard to the long term measures, the Town has investigated the purchase of mixers for the lagoons as proposed by SolarBee, Inc. The Town received several SolarBee proposals to submit plans, specifications

and calculations to the NHDES for review and approval, however in very recent discussions with SolarBee, they are not able to provide the required professional engineer's stamp. The Town is working on the engineering aspect as well as other proposal issues.

7. With regard to the Town's progress regarding infiltration and inflow, Water & Sewer Superintendent Bob Naylor has prepared: a) a plan to perform infiltration testing on the sewer system and b) a program to perform investigations for possible system inflows. Currently his plan defines both I&I testing to be completed by October 30, 2012.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,



Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

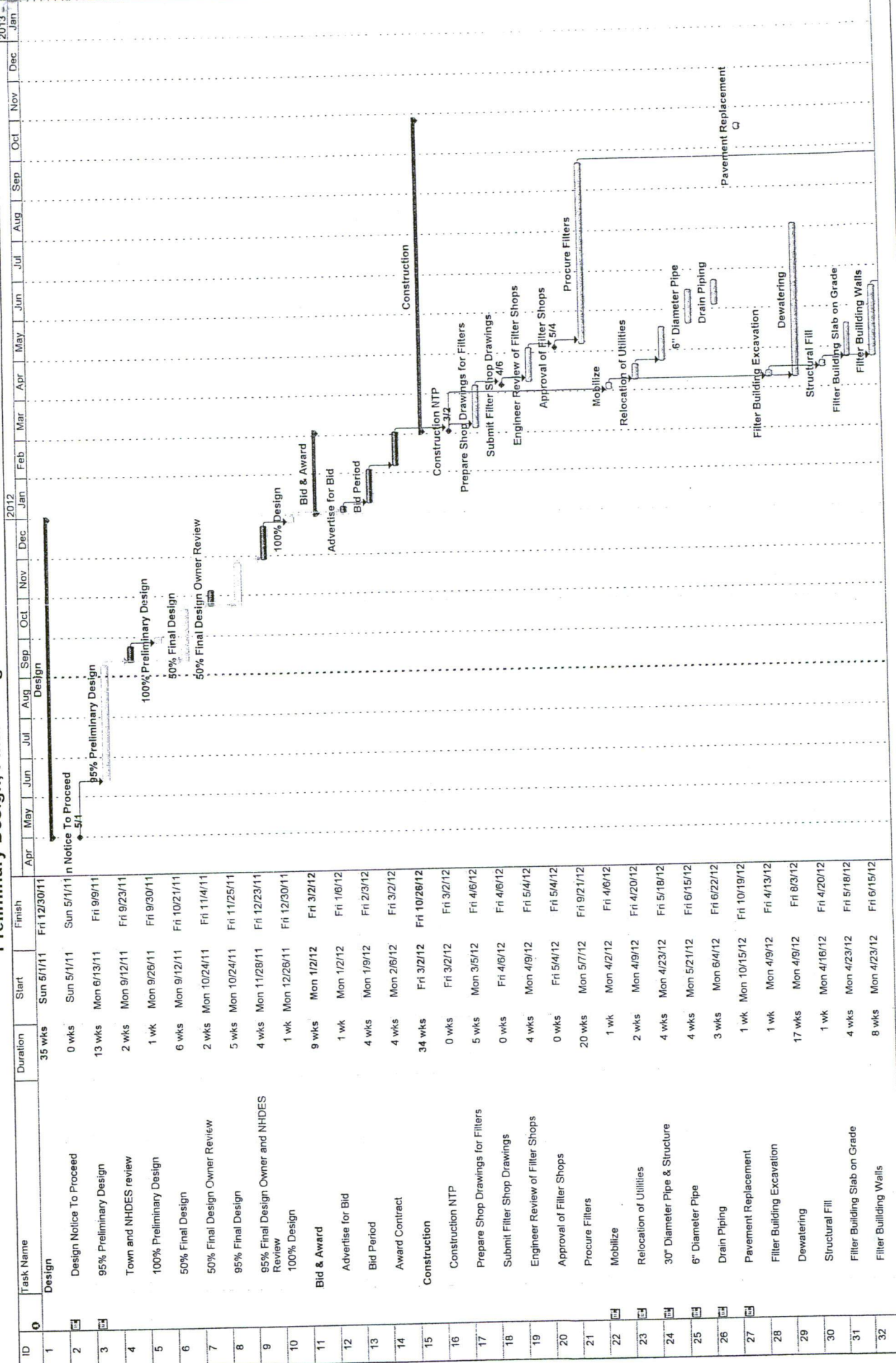
LAW/jas

cc: Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)  
P. Brown, Interim Town Manager  
A. Greenleaf, Wastewater Treatment Plant Superintendent  
R. Naylor, Water & Sewer Superintendent  
D. Setzko, AECOM Technical Services (200 Enterprise Drive, Suite 1A, Rocky Hill, CT 06067)

C:\Users\PublicWorks\Documents\WORD\STP\PhosphorusRemoval\USEPA-Studlien.QuarterlyRpt.2011-Apr-Jun.doc

EPA - CERTIFIED MAIL: 7010 3090 0002 9537 7139  
NHDES - CERTIFIED MAIL: 7010 3090 0002 9537 7146

# Exhibit D Newport, New Hampshire Filter Building Preliminary Design, Final Design & Construction Schedule



**Exhibit D**  
**Newport, New Hampshire**  
**Filter Building**  
**Preliminary Design, Final Design & Construction Schedule**

ID	Task Name	Duration	Start	Finish	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013
33	Erect Pre-engineered Structure	8 wks	Mon 6/18/12	Fri 8/10/12																							
34	Intermediate Pumps & Testing	6 wks	Mon 6/18/12	Fri 7/27/12																							
35	Interior Mechanical Piping	4 wks	Mon 8/13/12	Fri 9/7/12																							
36	Install Filters	3 wks	Mon 9/24/12	Fri 10/12/12																							
37	Install Filter Ancillary Equipment	4 wks	Mon 9/24/12	Fri 10/19/12																							
38	Electrical	18 wks	Mon 6/18/12	Fri 10/19/12																							
39	Metering Pumps	4 wks	Mon 6/18/12	Fri 7/13/12																							
40	Chemical Storage Tanks	4 wks	Mon 6/18/12	Fri 7/13/12																							
41	Small Diameter Piping	4 wks	Mon 7/30/12	Fri 8/24/12																							
42	Electrical for Metering Pumps	4 wks	Mon 7/16/12	Fri 8/10/12																							
43	I&C	15 wks	Mon 6/25/12	Fri 10/5/12																							
44	Start-Up	1 wk	Mon 10/22/12	Fri 10/26/12																							

**Wood, Tracy L**

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**From:** Wood, Tracy L  
**Sent:** Tuesday, May 24, 2011 8:24 AM  
**To:** 'pwdirector@newportnh.net'  
**Subject:** Newport May 18, 2011 Letter

Hi Larry,

DES received Newport's May 18, 2011 response letter to EPA's May 4, 2011 letter. For Item 2., I believe Joy was concerned that the AECOM schedule showed start-up activities beginning the end of October 2012, where the AO requires Newport to achieve full NPDES Permit compliance by October 31, 2012. As we know during start-up activities, NPDES permit violations often result, and it could take several months to fine tune a new process. EPA wrote is it "feasible for Newport to complete construction and plant start-up sooner" implying to have start-up activities begin a few months sooner to ensure full NPDES permit compliance is actually met by October 31, 2012.

Joy is out of the office until May 31<sup>st</sup>, but wanted to give you a heads up on Item 2., so you had time to think about it, as I am sure Joy will have a comment on it. Newport's answer may be the schedule is tight due to previous funding issues, or perhaps it is feasible to tighten up the schedule so start-up activities can begin a few months sooner.

-Tracy

Tracy L. Wood, P.E.  
Environmental Engineer  
Wastewater Engineering Bureau  
Water Division  
NH Department of Environmental Services  
29 Hazen Drive, P.O. Box 95  
Concord, New Hampshire 03302-0095  
Phone: (603) 271-1497  
Fax: (603) 271-4128  
E-Mail: [tracy.wood@des.nh.gov](mailto:tracy.wood@des.nh.gov)

5/24/2011



TOWN OF NEWPORT, N.H.

RECEIVED

MAY 23 2011

DES-WEB

May 18, 2011

Ms. Denny Dart, Manager  
Water Technical Unit  
U.S. Environmental Protection Agency  
Region 1  
5 Post Office Sq., Suite 100  
Boston, MA 02109

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Town of Newport Wastewater Treatment Plant Upgrade  
For Phosphorus Removal

Dear Ms. Dart:

The Town of Newport has received your letter of May 4, 2011 referencing the Town of Newport's April 12, 2011 Quarterly Report on the Town of Newport's Wastewater Treatment Plant Upgrade for Phosphorus Removal. In your letter, you requested the Town's response to questions raised in your letter. Please find the Town's response as follows:

1. Does Newport's \$2,971,458 Phosphorus Removal Upgrade project include improvements to the existing WWTF such as sludge removal and new mixers to achieve compliance with the WET limits contained in the NHDES Permit? For clarification, please provide a side-by-side comparison of the \$5,238,000 WWTF upgrade project recommended by AECOM and the \$2,971,458 Phosphorus Removal Upgrade project discussed in your April 12, 2011 letter to NHDES.

**Town of Newport Response:** With regard to sludge removal, the Town's Phosphorus Removal Upgrade does include improvements to the existing geotube sludge disposal facility. The improvements include building a structure over the geotubes for environmental issues and improvements to allow full geotube bags to be utilized. The coagulation followed by filtration with cloth media filter system will pump the sludge to the improved geotube facility. The Town intends to build these improvements with in-house engineering and construction. The Town has removed and disposed of sludge in the following quantities: 2005: 170 tons; 2006: 168 tons; 2008: 65 tons; 2009: 126.5 tons; 2010: 80 tons (estimated - removed from lagoons, but still onsite). Sludge removal will continue as a standard part of the operations of the plant.

May 18, 2011  
Page 1 of 3  
Letter of Response  
**RECEIVED**  
MAY 23 2011  
**DES WEB**

With regard to new mixers to achieve compliance with the WET limits, AECOM's evaluation in the Phosphorus Removal Alternative Study qualifies the mixer installation suggestion by stating "It is important to note here that the data supporting this conclusion is limited and that further evaluation and testing would be suggested to corroborate its conclusion before significant capital investment is made." To that end, the Town has directed its testing laboratory to perform some additional testing, specifically the toxicity identify evaluation (TIE) testing to perhaps allow a more specific analysis of the actual cause of ammonia issues.

Lastly, please find a side-by-side comparison of the projects as requested as follows:

**AECOM Recommended \$5,238,000 Wastewater Treatment Facility Upgrade**

1. Coagulation followed by filtration with a cloth media filter system
2. Influent pumping
3. All-weather building covering all equipment
4. Electrical and instrumentation system upgrades and updates
5. Geotube Sludge Handling Structure Improvements
6. Future UV system structural and electrical provisions inside Filter Building
7. Sludge storage included inside Filter Building

**Phosphorus Removal Upgrade Project (\$2,971,458) presented in April 12, 2011 Letter**

1. Coagulation followed by filtration with a cloth media filter system
2. Influent pumping
3. All-weather building covering all equipment
4. Geotube sludge handling structure improvements - Town Constructs
5. Electrical and instrumentation systems upgrades and updates
6. Provisions for future UV structure and electrical provided, but not in the Filter Building and as a future project
7. Sludge storage included in existing Control Building

Both project costs have improvements to the sludge handling facility (geotube area) however the \$2,971,458 project has the improvements completed by the Town. This reduces the engineering and construction costs. The remaining numerical difference in costs is the result of refinements in conceptual engineering, location of the Filter Building reduction in building footprint and depth, contingencies and engineering fees between those used in AECOM's study and those of my letter of April 12, 2011.

2. *Newport's proposed schedule for the Phosphorus Removal Upgrade project indicates that construction will be completed by October 22, 2012, followed by a plant start-up period. Is it feasible for Newport to complete construction and plant start-up sooner and achieve full NPDES Permit compliance by October 31, 2012 as required by the AO?*

**Town of Newport Response:** Please find enclosed a schedule as prepared by AECOM titled Filter Building and Preliminary Design and Construction Schedule.

3. *What activities are underway or planned, including any studies, for reducing I/I in Newport?*


**Town of Newport Response:** As stated in my letter to Ms. Susan Studlien on April 2, 2009 (reference letter included in AECOM's "Evaluation of Phosphorus Removal Alternatives" study, the Town of Newport has completed significant infrastructure improvements with regard to the existing sewer system. (Please reference chart developed by Water & Sewer Superintendent Robert Naylor dated March 31, 2009 (also included in study) listing the sewer system infrastructure improvements between 1993 and 2007.) The accumulative effect of these improvements is demonstrated in the enclosed chart titled Average Annual Flow vs. Total Rainfall for the Last 18 Years at the (Newport) WWTF as updated by WWTF Superintendent Arnold Greenleaf. This chart clearly shows the infiltration/inflow has been reduced.

The Town's future plans are to address the additional improvements as identified in AECOM's Alternative Study, Table 6-5. Once these improvements are completed, the Town has targeted the First, Second, Third and Fourth Street area as the next major infrastructure improvement project.

The Town's responses reflect the Town's understanding of the material presented in AECOM's "Evaluation of Phosphorus Removal Alternatives, Wastewater Treatment Facility, Newport, NH". The Town is reviewing this letter with AECOM.

I trust the above responses adequately address the issues raised in your letter.

Respectfully,



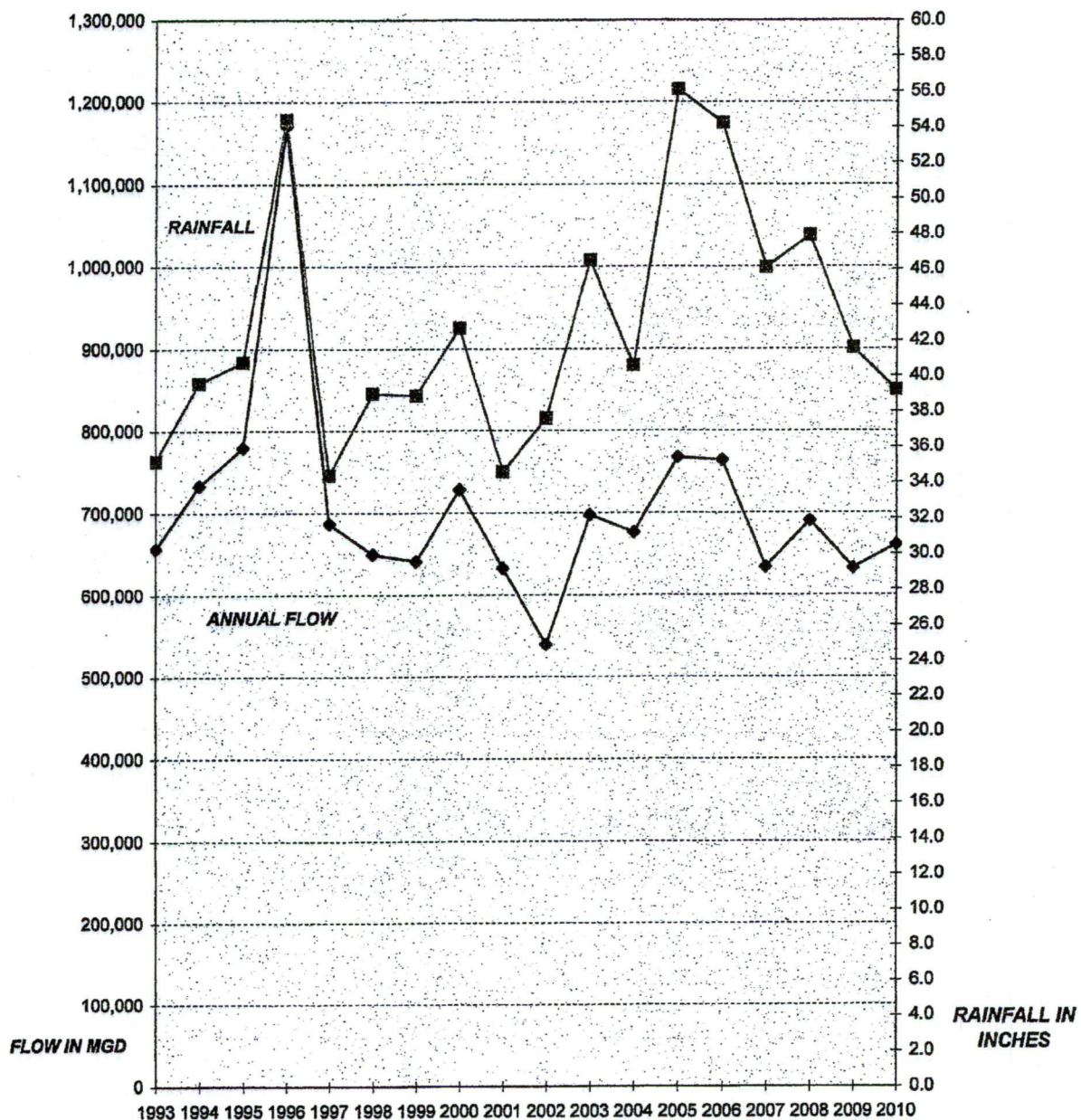
Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

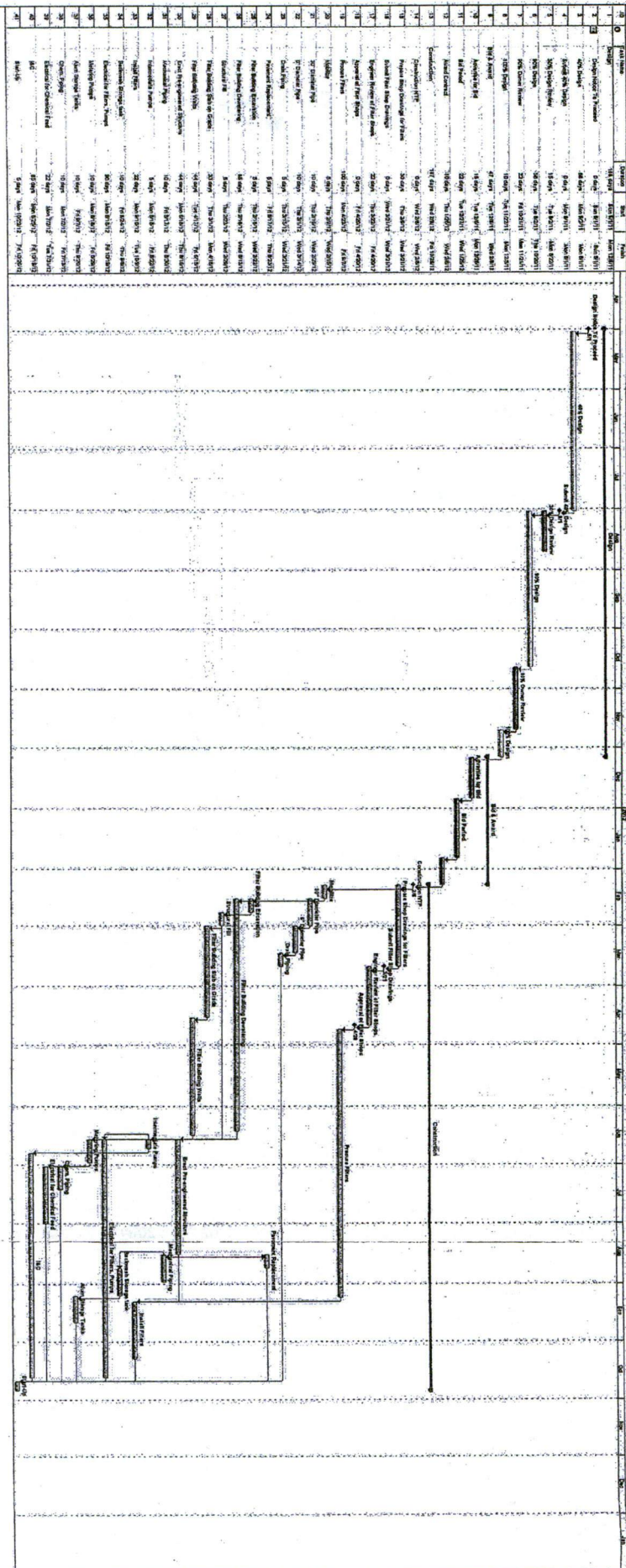
cc: Paul Brown, Interim Town Manager (w/ encl)  
Arnold Greenleaf, Wastewater Treatment Plant Superintendent (w/ encl)  
Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095) (w/ encl)  
Dennis Setzko, AECOM Technical Services (200 Enterprise Drive, Suite 1A, Rocky Hill, CT 06067) (w/ encl)

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EXPRESS MAIL: EF390613271US

**AVERAGED ANNUAL FLOW VS. TOTAL RAINFALL FOR THE LAST 18 YEARS AT THE WWTF.**

Newport, New Hampshire  
 Filter Building  
 Preliminary  
 Design & Construction Schedule





# TOWN OF NEWPORT, N.H.

June 22, 2011

Ms. Denny Dart, Manager  
Water Technical Unit  
U.S. Environmental Protection Agency  
Region 1  
5 Post Office Sq., Suite 100  
Boston, MA 02109

JUN 24 2011

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Town of Newport Wastewater Treatment Plant Upgrade  
For Phosphorus Removal

Dear Ms. Dart:

The Town of Newport has received your letter of June 16, 2011 requesting further information on the above referenced project, specifically whether it is feasible to expedite construction and start-up to comply with the October 31, 2012 AO deadline. The Town's response is as follows:

To receive further clarification with regard to this request, I spoke with Joy Hilton of the EPA on Monday, June 20, 2011. Based on that conversation, it is the Town's understanding that the EPA's concern is the start-up period identified on the schedule submitted with my last letter of response. The EPA is questioning whether or not start-up will be completed in the approximate one-week timeframe prior to the October 31, 2012 deadline. The EPA requests justification of the short start-up period rather than a typical two/three month timeframe.

The Town had posed this question to Dennis Setzko of AECOM (the Town's Consultant on the project) and received the following email response:

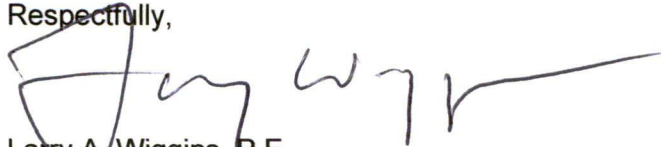
*"Larry: I don't expect violations and an extended start up period. We are buying a package from the filter mfr. complete with backwash system, controls, etc. so it is mostly plug and play. Once tested, it should be ready to go. From my last email -*

*As far as the schedule goes, if we were starting up a biological process and only had 9 days to achieve compliance, there would be cause for concern. But on October 22, 2012 we are placing online a filter with a known dose response curve, polymer use, and that has been started up and tested ahead of this date - so that achieving compliance should be accomplished within a day or two, and the remaining days until October 31 would be for debugging and fine tuning of the system."*

In summary, based on AECOM's response, it is feasible for Newport to complete construction (including start-up) of the phosphorus removal system by the October 31, 2012 AO deadline. Based on the facts known as of today, the Town expects the phosphorus removal system to be operational by the October 31, 2012 deadline without any delay or start-up issues.

I trust this letter adequately addresses the issue raised in your letter.

Respectfully,



Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

cc: Paul Brown, Interim Town Manager  
Arnold Greenleaf, Wastewater Treatment Plant Superintendent  
Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)  
Dennis Setzko, AECOM Technical Services (200 Enterprise Drive, Suite 1A, Rocky Hill, CT 06067)

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CERTIFIED MAIL: 7010 3090 0002 9542 6950



Newport Response Ltr dated June 22, 2011  
Wood, Tracy L  
to:  
Joy Hilton  
06/27/2011 11:44 AM  
[Show Details](#)

Hi Joy,

DES has received Newport's response letter dated June 22, 2011 to EPA letter dated June 16, 2011. DES has no comments on Newport's response except that time will tell.

-Tracy



**4-12-11 Newport Cover Ltr**  
**Wood, Tracy L** to: Joy Hilton

04/22/2011 01:20 PM

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History: This message has been replied to.

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1 attachment



4-12-11 Newport Ltr.pdf

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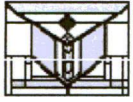
Hi Joy,

Attached is Newport's cover letter dated 4/12/11 to Paul Heitzler regarding Newport's Phosphorous Removal Upgrade Engineering Contracts. Item 2, last sentence, caught my attention. It states "Having not heard from the EPA, we understand we have met the other issues of the AO, ie. the wet toxicity, I&I issues, etc. with our previous submittals."

They may be assuming something that is not correct....

-Tracy

Tracy L. Wood, P.E.  
Environmental Engineer  
Wastewater Engineering Bureau  
Water Division  
NH Department of Environmental Services  
29 Hazen Drive, P.O. Box 95  
Concord, New Hampshire 03302-0095  
Phone: (603) 271-1497  
Fax: (603) 271-4128  
E-Mail: [tracy.wood@des.nh.gov](mailto:tracy.wood@des.nh.gov)



To: "Arnold L. Greenleaf" <trainsrfun2run@hotmail.com>  
Cc: Tracy Wood at NHDES <tracy.wood@des.nh.gov>  
Bcc:  
Subject: Re: looking for guidance before proceeding with the final design for the Newport NH WWTF

---

Dear Mr. Greenleaf:

Thank you for your June 15, 2010 email message written on behalf of the Town of Newport. In your message you asked EPA to provide answers/guidance to the following two questions: (1) what does Newport have to do to sufficiently address whole effluent toxicity ("WET") limits violations as the Town negotiates the design of the final wastewater treatment facility ("WWTF") upgrade; and (2) should the WWTF upgrade final design be capable of achieving nitrogen removal as well as total phosphorus removal to comply with current and future permit requirements?

In response to Newport's first question concerning WET violations, EPA offers the following guidance: First, review the bioassay laboratory reports documenting the WET limits violations again. Check and evaluate the WET data (including the dose-response and test Percent Minimum Significant Difference ("PMSD") values) in the reports. I reviewed Newport's WET data documenting chronic WET limit violations and noted that, in some cases, the test PMSD was less than the lower boundary of the acceptable PMSD range for the test....indicating that the WET test was a more sensitive test and had little within-test variability. The lab reported an observed CNOEC. In the case of more sensitive tests, the lab must also calculate the relative percent difference ("RPD") with the control population to determine the CNOEC value for NPDES reporting. This step was not completed by the bioassay lab and may affect NPDES Permit compliance. If you have any questions, please contact me.

In response to Newport's second question concerning total nitrogen limits, EPA Region I's Office of Environmental Stewardship would note that it can only enforce the requirements of the Town's existing NPDES permit. However, discussions with the Office of Ecosystem Protection ("OEP") noted the following: the next round of NPDES permits reissued by OEP to permittees in NH's Upper Connecticut River watershed are likely to include total nitrogen requirements similar to those in permits recently reissued to the towns of Littleton and Lancaster, NH. The permits hold the nitrogen discharged by Littleton and Lancaster to current levels and require the towns to prepare and submit reports with recommendations to be implemented such that the WWTFs optimize nitrogen removal and data trends are tracked. For more detail, please see Littleton, NH's fact sheet at <http://www.epa.gov/region1/npdes/permits/2009/finalnh0100153fs.pdf> and final permit at <http://www.epa.gov/region1/npdes/permits/2009/finalnh0100153permit.pdf>. Appendix D of the fact sheet lists Newport's existing total nitrogen load is 114.425 pounds/day.

Please contact me at 617-918-1877 or Dave McDonald at 617-918-8609 if you have additional questions concerning WET, and contact OEP's Dan Arsenault at 617-918-1562 if you have questions concerning permit requirements.

Sincerely,

Joy Hilton, Environmental Engineer  
Water Technical Unit (OES04-3)  
U.S. EPA - New England  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912  
Telephone: (617) 918-1877  
Fax: (617) 918-0877

"Arnold L. Greenleaf" Good Afternoon Joy and Tracy,

06/15/2010 03:02:46 PM

From: "Arnold L. Greenleaf" <trainsrfun2run@hotmail.com>  
To: Joy Hilton/R1/USEPA/US@EPA, Tracy Wood at NHDES <tracy.wood@des.nh.gov>  
Date: 06/15/2010 03:02 PM  
Subject: looking for guidance before proceeding with the final design for the Newport NH WWTF

---

Good Afternoon Joy and Tracy,

Our engineering company does not have the answers to two of our questions and as we are not sure who could answer them, I am emailing you both hoping that either of you would be able to help me.

In our preliminary engineering work we were required to address the issue of the continued failures in the WET testing, plus designs were looked at for not only treating for T phosphorus, but doing nitrogen removal in combination with the T Phos treatment.

Right now we are currently heading into the negotiations for the final design of the upgrade and we have no answers regarding what we will need to do concerning the failures in the WET testing. Do we need to have more study work done? Are the regulators satisfied that the new upgrade will stop the issues with the existing WET failures? Do we need to incorporate something into the new design for treatment capability that will stop future WET failures? Is there something else that we need to know regarding the WET failures that has to be addressed before we proceed with the final design so that we are not caught off guard part way through the project?

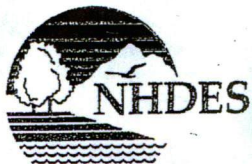
Our second concern is, do we need to treat for only TPhos or should we plan that we will need to design a plant to remove both T Phos and Nitrogen? The engineers have not answered our concerns with this issue so that we feel comfortable with proceeding with a T Phos removal only facility. I would appreciate it if either one of you could provide us with some guidance at this point or allay our concerns that we are at least proceeding in the right direction to resolve these problems.

Thank you and I look forward to hearing from you soon.

Sincerely:

Arnold L. Greenleaf/Plant Supt.  
Town of Newport, NH WWTF  
Newport, NH 03773

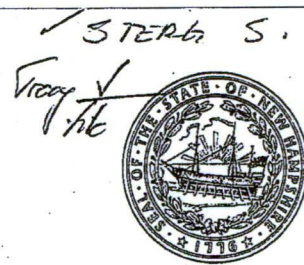
The New Busy think 9 to 5 is a cute idea. Combine multiple calendars with Hotmail. Get busy.



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

Thomas S. Burack, Commissioner

March 19, 2008<sup>10</sup>



Mr. Larry Wiggins, P.E.  
Public Works Director  
15 Sunapee Street  
Newport, NH 03773

Re: **Newport, NH - Evaluation of Phosphorus Removal Alternatives**  
**WWEB Project No. D2010-0201**

**REPORT APPROVAL**

Dear Mr. Wiggins:

The NH Department of Environmental Services (DES) is in receipt of the engineering report entitled *Evaluation of Phosphorus Removal Alternatives (January 2010)*, as prepared by AECOM for the Town of Newport and its wastewater treatment facility. We appreciate the opportunity to review and comment on the document.

The evaluation report, which was prepared and submitted in partial fulfillment of an EPA Administrative Consent Order, examines existing treatment processes/facilities at the Newport WWTF, and evaluates available technologies for reducing effluent total phosphorus concentrations to permitted limits of 0.42 mg/l. Based on economic and non-monetary considerations, the report recommends installation of chemical coagulation facilities and cloth media filters at an estimated total project cost of \$5.238 million.

**DES has examined the report and concurs in general with its findings and recommendations.**

Be reminded that the design and construction costs of recommended improvements are potentially eligible for funding assistance through DES's 20% grant and low-interest SRF loan programs (pending the availability of such funds).

Feel free to contact me at the address below, or by e-mail at [stephen.roberts@des.nh.gov](mailto:stephen.roberts@des.nh.gov), if you need clarification or additional information regarding this issue.

Sincerely,

Stephen H. Roberts, P.E.  
Senior Sanitary Engineer  
Wastewater Engineering Bureau

cc: Arnold Greenleaf - Newport WWTF Operator  
Dennis G. Setzco, P.E. - AECOM  
Stergios Spanos, P.E. - NHDES/WWEB

SHR/f:\wpdocs\Newport P-Removal Evaluation Report Approval.doc



FW: Newport, NH January 2010 Evaluation of Phosphorous Removal Alternatives  
Wood, Tracy L

to:

Joy Hilton

04/27/2011 09:20 AM

Show Details

1 Attachment



3-19-10 Design Review Ltr on Phosphorous Alternatives Report.pdf

-----Original Message-----

**From:** Wood, Tracy L

**Sent:** Wednesday, March 24, 2010 10:23 AM

**To:** 'Hilton.Joy@epa.gov'

**Subject:** Newport, NH January 2010 Evaluation of Phosphorous Removal Alternatives

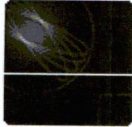
Hi Joy-

See attached DES Design Review letter on above referenced report – FYI.

-Tracy

Note: Letter is dated 2009 in error, should be 2010.

Tracy L. Wood, P.E.  
Environmental Engineer  
Wastewater Engineering Bureau  
Water Division  
NH Department of Environmental Services  
29 Hazen Drive, P.O. Box 95  
Concord, New Hampshire 03302-0095  
Phone: (603) 271-1497  
Fax: (603) 271-4128  
E-Mail: tracy.wood@des.nh.gov



**6/15/12 letter from Newport to Susan Studlien -EPA**

Joy Hilton to: trainsrfun2run  
Cc: Tracy.Wood

06/18/2012 10:54 AM

Dear Mr. Greenleaf:

This is a brief summary of our telephone discussion this morning. EPA's April 5, 2012 letter requires Newport to:

1. for the first year that the WWTF upgrade is operational (i.e. from October 31, 2012 through October 31, 2013), conduct compliance monitoring as required by the Town's NPDES Permit, assess the WET test data each quarter for compliance with the WET effluent limits contained in the Town's NPDES Permit, and include the WET limits compliance assessment in each quarterly AO Progress and Work Projection Report; and
2. by November 30, 2013, after one year of NPDES Permit compliance monitoring with the WWTF upgrade operational, submit to EPA and NHDES:
  - a) a letter report that summarizes the Town's quarterly evaluations of NPDES Permit limits compliance, if monitoring shows full compliance with the NPDES Permit limits; or,
  - b) an engineering report that recommends long-term corrective measures and a schedule for achieving compliance with the WET limits of the NPDES Permit, if WET limits compliance was not achieved with the WWTF upgrade.

If you have any additional questions, please feel free to call me at (617) 918-1877.

Sincerely,

Joy Hilton, Environmental Engineer  
Water Technical Unit (OES04-3)  
U.S. EPA - New England  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912  
Telephone: (617) 918-1877  
Fax: (617) 918-0877

----- Forwarded by Joy Hilton/R1/USEPA/US on 06/18/2012 09:17 AM -----

From: "Wood, Tracy L" <Tracy.Wood@des.nh.gov>  
To: Joy Hilton/R1/USEPA/US@EPA  
Date: 06/18/2012 08:38 AM  
Subject: FW: letter to Susan Studlien-EPA

---

FYI.

-----Original Message-----

**From:** Arnold L. Greenleaf [mailto:trainsrfun2run@hotmail.com]  
**Sent:** Wednesday, June 13, 2012 8:07 AM  
**To:** Wood, Tracy L  
**Subject:** cc: letter to Susan Studlien-EPA

Good Morning Tracy,

I am just getting this letter mailed to Susan, I didn't have her email address so it has gone snail mail. I wanted you to have a copy so you aware of a some of questions that just want to have verified.

Should you have any questions yourself just let me know via this email.

Thank you.



Arnold L. Greenleaf LETTERHEAD-Susan Studlien AT USEPA on WET testing questions.doc

TOWN OF NEWPORT/WWTF  
PUTNAM ROAD  
NEWPORT, NH 03773-1497  
603-863-4338  
MAY 21, 2012

USEPA -REGION 1  
5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MA 02109-3912  
ATTN: SUSAN STUDLIEN, DIRECTOR -OES

JUN 14 2012

RE: NPDES Permit #NH0100200 Administrative Order Docket # 09-015

Dear Ms. Studlien:

I am in receipt of a copy of your letter of April 5, 2012 to Larry Wiggins, DPW, which states your newest revisions to the AO for achieving compliance with the Whole Effluent Toxicity (WET) testing requirements. I just want some clarification in exactly what you are looking for in reporting and toxicity evaluations relative to the one year period after the October 31, 2012 deadline.


The first item that I want to confirm is the use of the WET tests. In your sentence, "After completing the WWTF Upgrade,... will require a *one-year period* (my italics) of Permit compliance monitoring with quarterly WET data evaluations/reports,... Are you requesting that we run additional Quarterly WET tests separate from the ones that we would already be running under the auspices of the NPDES permit for that 5 year permit period? Will the WET tests that we would be required to do during that time period be acceptable?

You are also stating, "...WET data evaluations/reports...." What I am looking for is what you want from the 'evaluation', is this work the lab will need to do or do you want a third-party checking over the reports for possible problems? Our lab currently provides the reports and a qualifying letter stating what issues there were if the test had problems. Do you want us to have the lab run TRE testing, extra metals tests or run any other lab tests, as needed, to pinpoint the cause each time we have a failure in any part of the test?

Should there anything else that I need to know to get the proper testing and data required to fulfill the requirements of this order, please let me know at this time so that I can discuss our needs with our tox lab, so they will know what is expected of them.

Should you need any further information or have any questions please feel free to give me a call here at the plant, at 603-863-4338, Mon-Thurs. Thank you.

Sincerely:



Arnold L. Greenleaf/Plant Supt.

Cc: Larry Wiggins, Town of Newport DPW  
Paul Brown, Town Manager  
Tracey Wood, NHDES  
FILE, USEPA Admin Order



TOWN OF NEWPORT, N.H.

## FAX TRANSMISSION

DATE: 7/22/09  
FAX TO: Ms. Joy Hilton  
ATTN: \_\_\_\_\_  
FAX NO.: 617-918-0877

FROM: Larry A. Wiggins  
NEWPORT Public Works DEPARTMENT  
FAX NO.: 603-863-8015

**FAX TRANSMISSION REGARDING:**

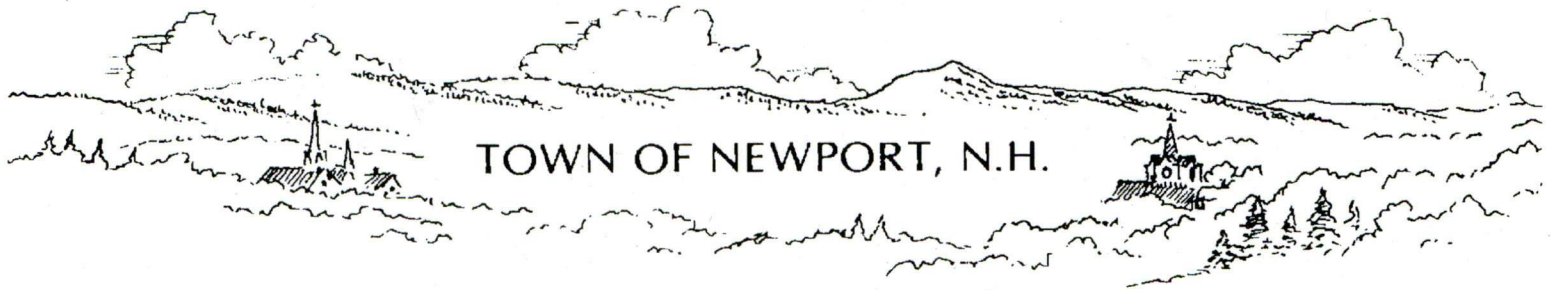
NPDES Permit No. NH0100200  
Administrative Order Rocket No. 09-015  
Town of Newport Wastewater Treatment  
Plant Upgrade - Facilities Plan

PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 603-863-3650 IF YOU DO NOT RECEIVE ALL PAGES OR HAVE ANY QUESTIONS REGARDING THIS DOCUMENT.

TOTAL PAGES INCLUDING THIS COVER PAGE 3

C:\OFFICE\WPWIN\WPDOS\FORMS\FAXTRANS.FRM

Public Works Department • 15 Sunapee Street, Suite 1 • Newport, NH 03773-1497  
Telephone: 603-863-3650 • Fax: 603-863-8015



July 23, 2009

Ms. Susan Studlien, Director  
Attn: Ms. Joy Hilton  
Office of Environmental Stewardship  
U.S. Environmental Protection Agency  
Region 1  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Town of Newport Wastewater Treatment Plant Upgrade - Facilities Plan

Dear Ms. Studlien,

With regard to the above Administrative Order (AO), please be advised the Town has completed negotiations with AECOM regarding a contract to complete the Facilities Plan for the Town of Newport's Wastewater Treatment Facility Upgrade. The contract format utilizes the NHDES Engineering Report Phase Contract with some additional town covenants. This proposed contract has been sent to the NHDES for review purposes.

Please note the Town is requesting EPA approval of an extension of the completion date for the Facilities Plan. The AO requires that the Town complete a Facilities Plan by December 31, 2009. Since the Public Works Department has historical information showing that the end of October and the first part of November are critical periods for wastewater treatment plant operations, the Facilities Plan proposes performing pilot testing during this time period. Due to that requirement, AECOM has requested additional time to compile and evaluate the pilot testing data and prepare a report for the Town and the EPA. The Town is therefore requesting an extension of the Facilities Plan completion date to January 31, 2010 (one month later than the date required by the AO).

Public Works Department • 15 Sunapee Street, Suite 1 • Newport, NH 03773-1497  
Telephone: 603-863-3650 • Fax: 603-863-8015

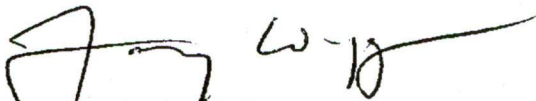


TOWN OF NEWPORT, N.H.

Due to negotiations taking longer than expected, the Town requests the EPA's response at the earliest possible convenience to allow AECOM adequate time to perform the necessary engineering required prior to pilot testing. The Town will execute the contract upon receipt of approval from the NHDES and your office.

Please call me at (603) 863-3650 or Wastewater Treatment Plant Operator Arnold Greenleaf at (603) 863-4338 if you need additional information.

Sincerely,



Larry Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

cc: Tracy Wood, P.E., NHDES  
D. O'Neill, Town Manager  
P. Brown, Finance Director  
A. Greenleaf, Wastewater Treatment Plant Supt.  
D. Setzko, P.E., AECOM

C:\Documents and Settings\Judy\Desktop\Temp Secretary\EPA-WTP.Upgrade.Facilities.Plan.wpd

Certified Mail: 7005 3110 0000 1656 4160

Public Works Department • 15 Sunapee Street, Suite 1 • Newport, NH 03773-1497  
Telephone: 603-863-3650 • Fax: 603-863-8015



"Wood, Tracy L"  
<Tracy.Wood@des.nh.gov>  
07/28/2009 02:53 PM

To Joy Hilton/R1/USEPA/US@EPA  
cc  
bcc

Subject Newport EPA AO 09-015

History:

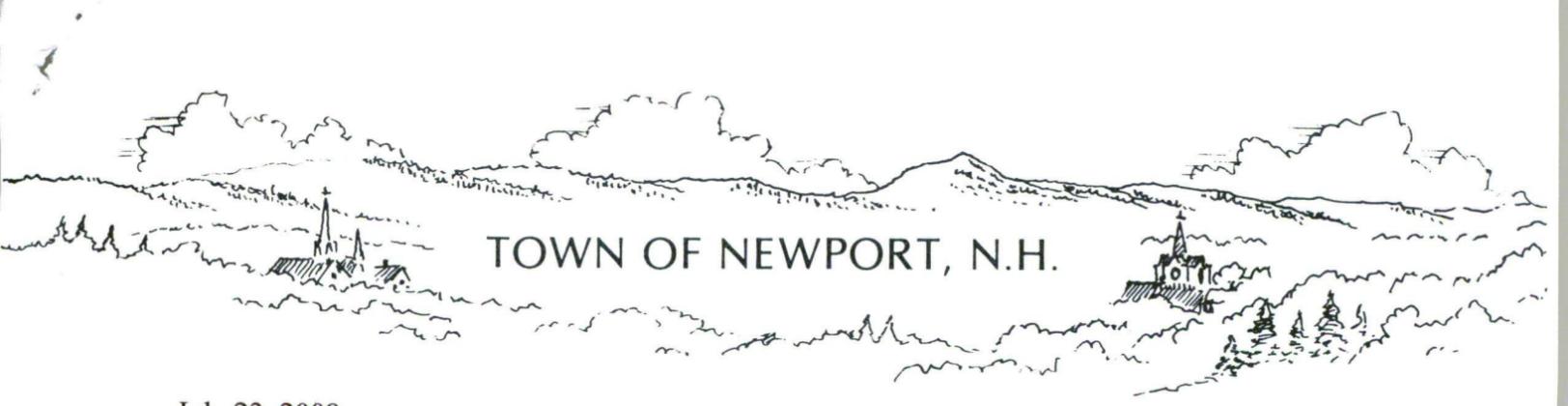
✉ This message has been replied to.

Hi Joy-

DES received a cc: on a letter today regarding Newport EPA AO 09-015 asking for an extension of 30 days for completion of its Facilities Plan – from 12/31/09 to 1/31/10. DES has no objection to this.

-Tracy

Tracy L. Wood, P.E.  
Environmental Engineer  
Wastewater Engineering Bureau  
Water Division  
NH Department of Environmental Services  
29 Hazen Drive, P.O. Box 95  
Concord, New Hampshire 03302-0095  
Phone: (603) 271-1497  
Fax: (603) 271-4128  
E-Mail: tracy.wood@des.nh.gov



TOWN OF NEWPORT, N.H.

July 23, 2009

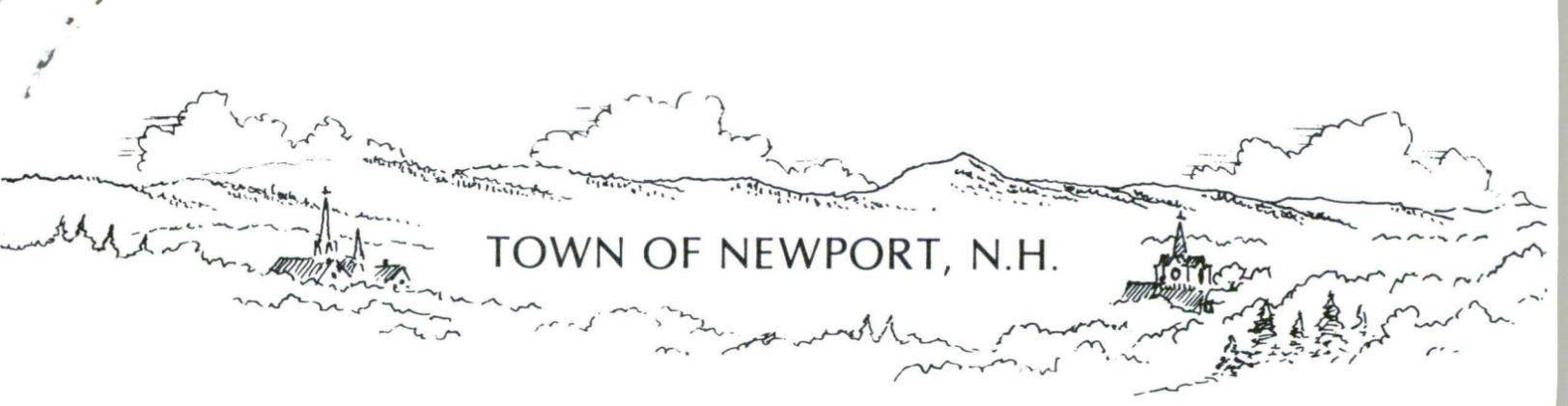
Ms. Susan Studlien, Director  
Attn: Ms. Joy Hilton  
Office of Environmental Stewardship  
U.S. Environmental Protection Agency  
Region 1  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

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Administrative Order Docket No. 09-015  
Town of Newport Wastewater Treatment Plant Upgrade - Facilities Plan

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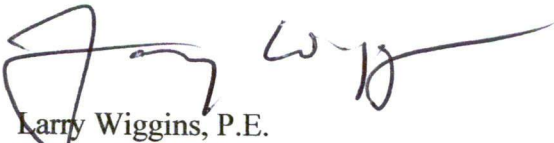


TOWN OF NEWPORT, N.H.

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Please call me at (603) 863-3650 or Wastewater Treatment Plant Operator Arnold Greenleaf at (603) 863-4338 if you need additional information.

Sincerely,



Larry Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

cc: Tracy Wood, P.E., NHDES  
D. O'Neill, Town Manager  
P. Brown, Finance Director  
A. Greenleaf, Wastewater Treatment Plant Supt.  
D. Setzko, P.E., AECOM

C:\Documents and Settings\Judy\Desktop\Temp Secretary\EPA-WTP.Upgrade.Facilities.Plan.wpd

Certified Mail: 7005 3110 0000 1656 4160



Joy Hilton/R1/USEPA/US

07/08/2009 08:14 AM

To trainsrfun2run@hotmail.com

cc

bcc

Subject Re: questions on WET requirement in the AO for the Town of Newport NH

Arnold-

Thank you for sending your questions to me in an email message. Here are my responses to your questions:

*1) Is this paragraph part of the 'Boilerplate' for the AO or is there really a specific problem with our toxicity results that are causing you a problem and we need to address them?*

Paragraph III.3. of AO #09-015 requires the Town to address the acute and chronic whole effluent toxicity (WET) permit limits violations and to determine what can be done, short-term and long-term, to comply. This requirement is not AO 'boilerplate' language.

*2) Does it pertain to the entire lifespan of testing that we have for this test procedure or just the last 5-6 years? We have been running this test since 1995 and the violations are usually intermittent over time.*

The Town should review all of the available bioassay and associated chemistry data to determine the likely cause(s) of WET. Look for patterns. For example, Newport's October tests bioassay results demonstrate effluent toxicity, and *C. dubia* data indicates that it was more sensitive to the Town's WWTF effluent. *C. dubia* is more sensitive to certain pollutants.

*3) Is it really necessary to undertake a full TRE or can we do an assessment of the actual violations to see if is not more of a lagoon issue versus upstream users. I see these reports everytime and usually there has been something to do with an upset lagoon system due to the turnover in the spring and the fall. We have also experienced problems with lab procedures resulting in less than stellar results.*

An WET assessment by an engineer, not a full TRE, seems appropriate based on the information you provided. The Town and its consultant shall determine what short-term and long-term measures Newport will take to reduce and eliminate WET, and propose a schedule for implementing recommendations.

*4) We tend to see the toxicity problems as part of the actual treatment process, the use of the lagoons, and once the lagoons are modified or more than likely eliminated, then the toxicity issues will no longer be part of the equation.*

This should be explained as part of the engineer's assessment and will influence the alternatives selection process for the WWTF upgrade. The AO requires Newport to achieve full permit compliance by no later than October 31, 2012.

Please let me know if you have any other questions.

Joy Hilton, Engineer  
Water Technical Unit  
U.S. EPA - Region 1  
1 Congress Street, Suite 1100 (SEW)  
Boston, MA 02114-2023  
Telephone: (617) 918-1877  
Fax: (617) 918-0877  
"Arnold L. Greenleaf" <trainsrfun2run@hotmail.com>



"Arnold L. Greenleaf"  
<trainsrfun2run@hotmail.com>  
m>

07/06/2009 03:16 PM

To Joy Hilton/R1/USEPA/US@EPA  
cc Larry Wiggins DPW <pwdirector@newportnh.net>  
Subject questions on WET requirement in the AO for the Town of  
Newport NH

Hi Joy,

As we seem to be playing more phone tag than anything, I will try this channel of communication.

I have some questions on the requirement for the WET review in the AO for the Town;

- 1) Is this paragraph part of the 'Boilerplate' for the AO or is there really a specific problem with our toxicity results that are causing you a problem and we need to address them?
- 2) Does it pertain to the entire lifespan of testing that we have for this test procedure or just the last 5-6 years? We have been running this test since 1995 and the violations are usually intermittent over time.
- 3) Is it really necessary to undertake a full TRE or can we do an assessment of the actual violations to see if is not more of a lagoon issue versus upstream users. I see these reports everytime and usually there has been something to do with an upset lagoon system due to the turnover in the spring and the fall. We have also experienced problems with lab procedures resulting in less than stellar results.
- 4) We tend to see the toxicity problems as part of the actual treatment process, the use of the lagoons, and once the lagoons are modified or more than likely eliminated, then the toxicity issues will no longer be part of the equation.

Our concerns are that in the process of trying to negotiate the engineering proposal we are looking at a rather large chunk of cash to do this and the engineering company is looking at doing a full blown TRE to address this requirement. If the lagoons are going away then the violations will go away as well, so we would be spending a lot of money now to only state

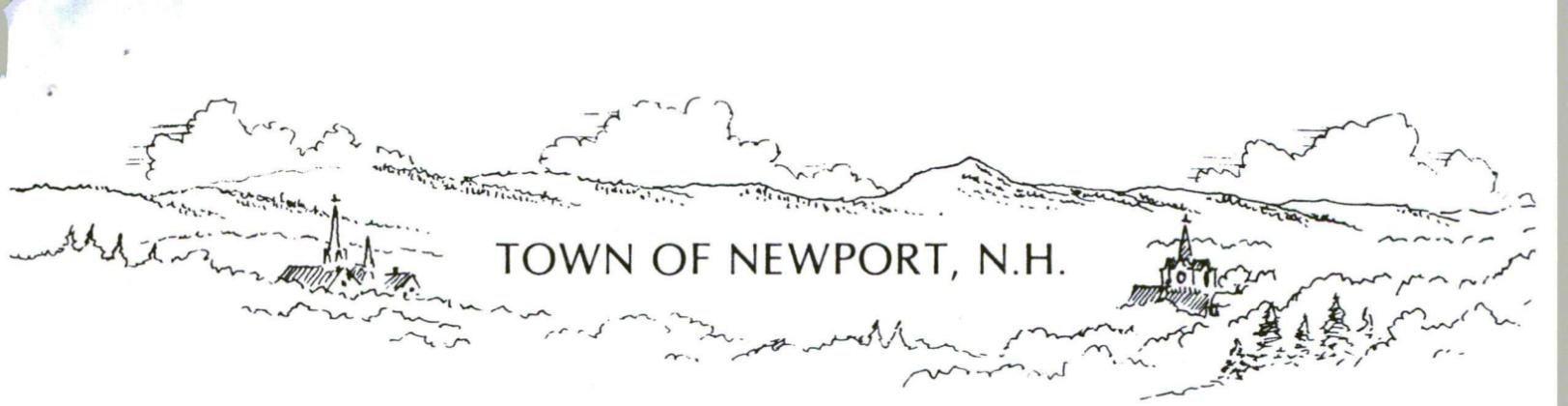
the obvious and ultimately engineer the problem away in the end. So is there another lesser expensive option that we can persue to address this requirement for you?

You may certainly respond via this email message or give me a call if you have a chance. Thank you.

Sincerely,

Arnold L. Greenleaf  
Town of Newport, NH WWTF

Windows Live™: Keep your life in sync. [Check it out.](#)



TOWN OF NEWPORT, N.H.

April 2, 2009

Ms. Susan Studlien, Director  
Office of Environmental Stewardship  
US EPA – Region 1  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

RE: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Ms. Studlien:

This letter is in response to Paragraph 1a, Section 3 *ORDER* of the EPA's Administrative Order (AO) issued to the Town of Newport as received on March 6, 2009.

Paragraph 1a states *"The Wastewater Treatment Facility Upgrade Facilities Plan shall include an evaluation of the extraneous flows that enter the Town's collection system during wet weather and recommendations to address capacity issues associated with excessive infiltration and inflow."*

In response to the EPA's direction in Paragraph 1a, please find the following enclosed:

1. Water & Sewer Superintendent Robert K. Naylor's memo to me dated March 31, 2009 providing a chronological listing of projects constructed by the Town of Newport that replaced sewer mains and sewer service lines between the years of 1993 and 2007.
2. Wastewater Treatment Plant Superintendent Arnold Greenleaf's chart titled *Averaged Annual Flow vs. Total Rainfall*, dated April 1, 2009, for Newport's WWTF.

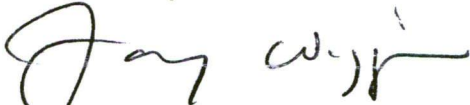
A review of Mr. Naylor's project history demonstrates the Town's proactive nature regarding replacement of sewer lines, services and stations. These projects reflected a serious investment by the rate payers over those years. Correspondingly, a review of the Wastewater Treatment Facility's inflow vs. rainfall over the same period, demonstrates the effect of the Town's investment in sewer rehabilitation. It is immediately apparent that total annual flows to the plant have been reduced.

Please note that even though rainfall has dramatically increased in the latter years, the WWTF's flows have not.

In addition to almost three (3) miles of sewer main/services rehabilitated, the Town has also replaced two sewer stations (2003 Parkview Sewer Station and 2007 Guild Sewer Station).

I trust this information adequately addresses the WWTF Upgrade Facilities Plan requirement with regard to evaluation of the extraneous flows as required by the AO. If this is not the case, please contact me at 603-863-3650 or at the address below.

Respectfully,




Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

cc: D. O'Neill, Town Manager (w/ encl)  
P. Brown, Finance Director (w/ encl)  
R. Naylor, Water & Sewer Supt. (w/ encl)  
A. Greenleaf, WWTP Supt. (w/ encl)  
Tracy L. Wood, P.E., NHDES (w/ encl)  
Joy Hilton, USEPA (w/ encl)

# Memo

To: Larry Wiggins, Director of Public Works  
From: Robert K. Naylor, Supt. of Water & Sewer Dept.   
Subject: Collection System Upgrades  
Date: March 31, 2009

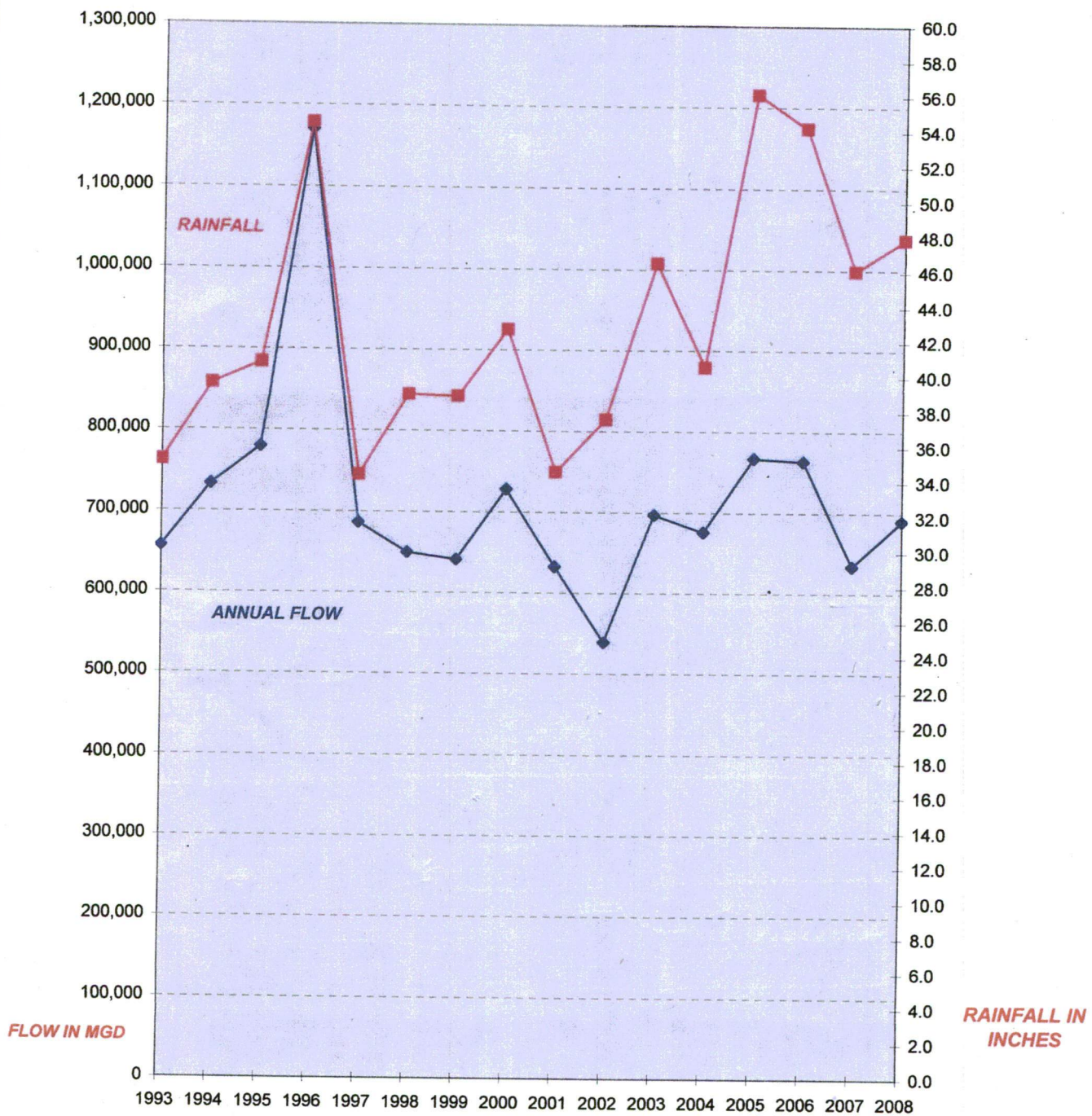
Between the years 1993 and 2005, we have replaced over 10,100 feet of our sewer system main lines. In addition we have replaced more than 4,200 feet of residential sewer service lines and have grout sealed more than 1,400 feet of old sewer main lines.

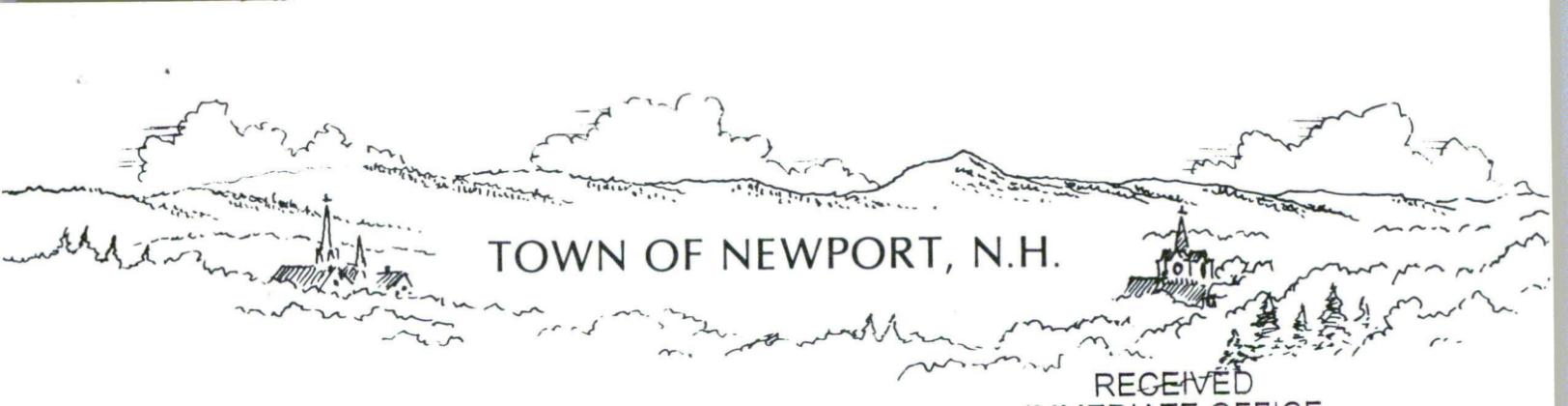
I have attached a chart of these sewer projects.

Year	Project	Streets	Main Lines	Service Lines	Main Totals	Service Line Totals
1993	Green Road Project					
		Dale	310	61		
		Cross Country	300			
		Middle	280	475		
		Oak	1,025	644		
		Victory	295			
		Walnut	520	305		
		North Main		91	2,730	1,576
1996	Pleasant St Project					
		Middle	280	230		
		Pleasant	590	353		
		Campus	110	175		
		Syndicate	752	401		
		Myrtle	10	189		
		Court	150	34	1,892	1,382
1998	Sugar River Hydro					
		Cross Country			569	
1998	Central Street Project					
		Central	800	110	800	110
2002	South Main Street Project					
		South Main	1,915	688	1,915	688
2003	Parkview Project					
		Parkview	450		450	
2003	Grout Sealing Project	Maple & Laurel	1,414			
2005	Cheney					
		Cheney	1,525	503		503
		Lincoln	25		1,550	
2007	Guild Pump Station Project	Cross Country	275		275	
Total Sewer Main Replacement:		10,181				
Total Grout Seal:		1,414				
Total Service Line Replacement:		4,259				



# **AVERAGED ANNUAL FLOW VS. TOTAL RAINFALL FOR THE LAST 16 YEARS AT THE WWTF.**





TOWN OF NEWPORT, N.H.

RECEIVED  
IMMEDIATE OFFICE

April 2, 2009

APR 8 - 2009

US EPA  
OFFICE OF ENVIRONMENTAL STEWARDSHIP

Ms. Susan Studlien, Director  
Office of Environmental Stewardship  
US EPA – Region 1  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

RE: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Ms. Studlien:

This letter is in response to Paragraph 1a, Section 3 *ORDER* of the EPA's Administrative Order (AO) issued to the Town of Newport as received on March 6, 2009.

Paragraph 1a states *"The Wastewater Treatment Facility Upgrade Facilities Plan shall include an evaluation of the extraneous flows that enter the Town's collection system during wet weather and recommendations to address capacity issues associated with excessive infiltration and inflow."*

In response to the EPA's direction in Paragraph 1a, please find the following enclosed:

1. Water & Sewer Superintendent Robert K. Naylor's memo to me dated March 31, 2009 providing a chronological listing of projects constructed by the Town of Newport that replaced sewer mains and sewer service lines between the years of 1993 and 2007.
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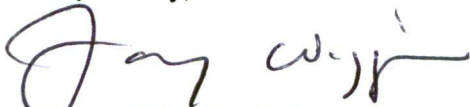
A review of Mr. Naylor's project history demonstrates the Town's proactive nature regarding replacement of sewer lines, services and stations. These projects reflected a serious investment by the rate payers over those years. Correspondingly, a review of the Wastewater Treatment Facility's inflow vs. rainfall over the same period, demonstrates the effect of the Town's investment in sewer rehabilitation. It is immediately apparent that total annual flows to the plant have been reduced.

Please note that even though rainfall has dramatically increased in the latter years, the WWTF's flows have not.

In addition to almost three (3) miles of sewer main/services rehabilitated, the Town has also replaced two sewer stations (2003 Parkview Sewer Station and 2007 Guild Sewer Station).

I trust this information adequately addresses the WWTF Upgrade Facilities Plan requirement with regard to evaluation of the extraneous flows as required by the AO. If this is not the case, please contact me at 603-863-3650 or at the address below.

Respectfully,



Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

cc: D. O'Neill, Town Manager (w/ encl)  
P. Brown, Finance Director (w/ encl)  
R. Naylor, Water & Sewer Supt. (w/ encl)  
A. Greenleaf, WWTP Supt. (w/ encl)  
Tracy L. Wood, P.E., NHDES (w/ encl)  
Joy Hilton, USEPA (w/ encl)

Year	Project	Streets	Main Lines	Service Lines	Main Totals	Service Line Totals
1993	Green Road Project					
		Dale	310	61		
		Cross Country	300			
		Middle	280	475		
		Oak	1,025	644		
		Victory	295			
		Walnut	520	305		
		North Main		91	2,730	1,576
1996	Pleasant St Project					
		Middle	280	230		
		Pleasant	590	353		
		Campus	110	175		
		Syndicate	752	401		
		Myrtle	10	189		
		Court	150	34	1,892	1,382
1998	Sugar River Hydro					
		Cross Country			569	
1998	Central Street Project					
		Central	800	110	800	110
2002	South Main Street Project					
		South Main	1,915	688	1,915	688
2003	Parkview Project					
		Parkview	450		450	
2003	Grout Sealing Project	Maple & Laurel	1,414			
2005	Cheney					
		Cheney	1,525	503		503
		Lincoln	25		1,550	
2007	Guild Pump Station Project	Cross Country	275		275	
Total Sewer Main Replacement:		10,181				
Total Grout Seal:		1,414				
Total Service Line Replacement:		4,259				

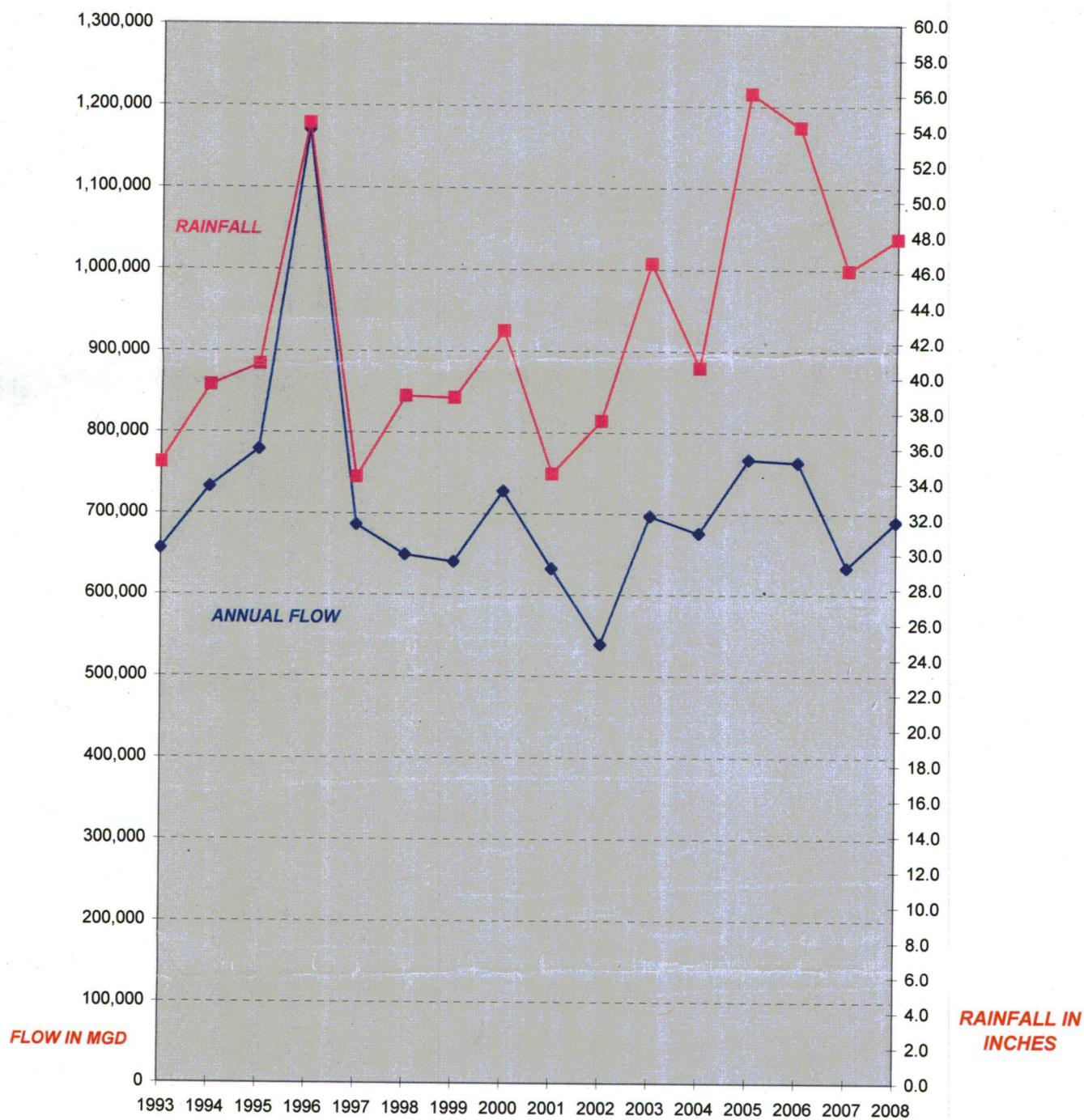
# Memo

To: Larry Wiggins, Director of Public Works  
From: Robert K. Naylor, Supt. of Water & Sewer Dept. *RK*  
Subject: Collection System Upgrades  
Date: March 31, 2009

Between the years 1993 and 2005, we have replaced over 10,100 feet of our sewer system main lines. In addition we have replaced more than 4,200 feet of residential sewer service lines and have grout sealed more than 1,400 feet of old sewer main lines.

I have attached a chart of these sewer projects.

# **AVERAGED ANNUAL FLOW VS. TOTAL RAINFALL FOR THE LAST 16 YEARS AT THE WWTF.**





"Spanos, Stergios"  
<Stergios.Spanos@des.nh.gov>  
v>

03/20/2009 08:19 AM

To Joy Hilton/R1/USEPA/US@EPA

cc "Wood, Tracy L" <Tracy.Wood@des.nh.gov>

bcc

Subject RE: 090316-aam-npt-newport-town-budget

Here it is ...

Board approves town budget

No increase, deliberative session April 7; lagoon closing on warrant By:

By ARCHIE MOUNTAIN, Staff Writer Last modified at: 3/16/2009 11:35 PM

NEWPORT -- Following a public hearing Monday night, the Newport Board of Selectmen gave final approval to the 2009-10 town operating budget of \$8,516,656, exactly the same as the current budget.

Earlier in the evening, the Newport Budget Committee also gave its blessing to the budget that will keep the town tax rate at its current level. The default budget would be \$80,740 more and that would raise the tax rate by approximately 20 cents per \$1,000 of property valuation.

The Newport school budget approved a week ago was also level-funded.

Voters will have an opportunity to approve the budget as presented or make changes at the deliberative session starting at 6 p.m. Tuesday, April 7 in the Newport Opera House. The voting portion of the annual town meeting will be from 8 a.m. to 7 p.m., Tuesday, May 12, also in the opera house.

Town Business Administrator Paul Brown reviewed highlights of the budget prior to the vote by the select board.

A special article seeking \$2.4 million to close the Guild lagoons requiring a three-fifths majority will also come before voters. Newport is anticipating it will receive \$1.2 million in federal stimulus funding to help pay for the lagoon closure. Another \$600,000 will come from the existing capital reserve fund leaving \$1.8 million to be bonded. The stimulus money will be sent to Newport annually over the 10-year life of the bond.

Over the life of the bond, interest at 2.63 percent will total \$260,370. Newport's share the first year in 2011 is projected at \$107,340. That number will drop each year, ending at \$64,734 in 2020, the final year. Some financial help may also come from the former owner of the property, according to Town Manager Dan O'Neill.

The town's number one concern at this time is to secure funding of \$150,000 from the sewer fund for preliminary costs of upgrading the wastewater treatment plant for the reduction of phosphates from the plant discharge water as required by an order from the United States Environmental Protection Agency dated March 6. The project must be completed by Oct. 31, 2012.

Originally Newport had planned to request \$300,000 for the first phase when the completion date was June 30, 2012. The extension to Oct. 31 has

allowed Newport to reduce that amount by \$150,000.

Last year, Newport voters rejected a request for \$100,000 to start working on the project but the article was defeated by two votes. Had it been approved, Newport would have been in a position today to apply for federal stimulus funding, O'Neill said. "That would have saved millions of dollars for the community." "That's water under the bridge now," he said.

With the phosphate article a top priority, the select board decided against requesting \$178,000 for the first phase of developing a new water source for the town on a 4-1 vote.

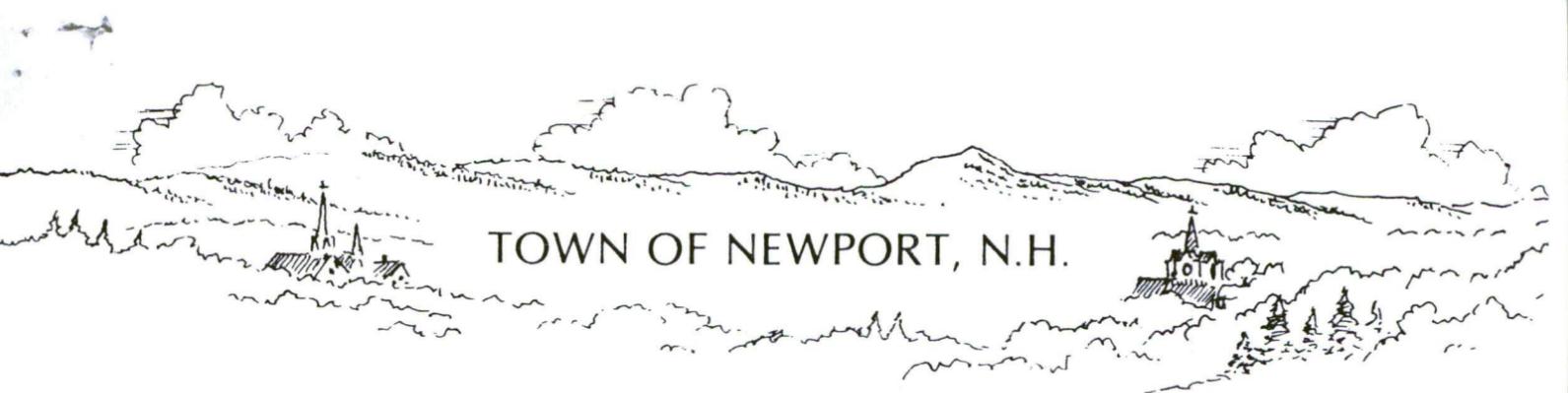
The select board was also updated on the proposed Bald Mountain Tax Increment Financing District in Guild. The estimated cost of the proposed improvements is \$1,575,000 (three phases) which will be financed jointly by the tax proceeds from the TIF district, a pending \$500,000 Community Development Block Grant and developer investments.

Three members of the public, including two budget committee members, stayed for discussion on the TIF district and then left. There was no one attending from the public on the remainder of the budget discussions.

-----Original Message-----

From: Hilton.Joy@epamail.epa.gov [mailto:Hilton.Joy@epamail.epa.gov]  
Sent: Friday, March 20, 2009 7:30 AM  
To: Spanos, Stergios  
Cc: Wood, Tracy L  
Subject: Re: 090316-aam-npt-newport-town-budget

I want to thank you for sending me the link but the link was broken and I can't seem to get the story. I'll try Google now. Please let me know how things turned out.....



TOWN OF NEWPORT, N.H.

TELEPHONE  
MEMORANDUM

To: Ms. Joy Hilton  
US Environmental Protection Agency – Region 1  
One Congress Street - Suite 1100  
Boston, MA 02114-2023

From: Larry Wiggins, Dir. of Public Works


Subject: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Date: March 12, 2009

L. Wiggins called Ms. Hilton with regard to clarification of the above referenced Administrative Order as received by the Town on March 11, 2009. Specifically, L. Wiggins' concerns were in regard to the first sentence of paragraph 3 of Susan Studlien's cover letter which states, *"Towards that end, EPA's Administrative Order requires that by December 1, 2009 the Town complete and submit a facilities plan that evaluates the upgrade of the WWTF."* L. Wiggins noted to Ms. Hilton that in previous correspondence, the Town's Compliance Schedule submitted had identified that the engineering study would be complete by January of 2010 however, wanted to note that all previously submitted compliance schedules requested a 2 to 3 month review and comment period. L. Wiggins requested that the Administrative Order be revised to reflect that completion of the entire study would not occur until March 2010. L. Wiggins also explained that due to pilot testing requirements, which the Town of Newport felt would be required to be performed between September and December of 2009, that insufficient time remained for the engineers to complete their report by the end of December.

In her response, Ms. Hilton stated that the subject sentence could be revised to reflect that the **draft** of the study was to be completed by 2010 and that indeed the schedule should allow for review by the Town, NHDES and EPA. L. Wiggins summarized the conversation by asking Ms. Hilton if it would be correct to revise the sentence in essence to state *"Towards that end, EPA's Administrative Order requires that by December 31, 2009 the Town complete and submit a **draft** facilities plan that evaluates the upgrade of the WWTF"*. Ms. Hilton agreed that was an acceptable summary of the conversation. It was L. Wiggins' understanding that the **final** report would be due 2 to 3 months after the December 31, 2009 date in the Administrative Order.

L. Wiggins noted that Section III – Order, Paragraph 1 – Wastewater Treatment Facilities Upgrade, Sub-paragraph a, first sentence, of the Administrative Order also had similar language with regard to the December 31, 2009 deadline. Based on the above conversation, L. Wiggins assumed the first sentence could be revised to include the word **draft** report with the understanding that a review/comment period and the final permit would be required later.

  
Larry A. Wiggins, Director of Public Works

LAW/jas

cc: D. O'Neill, Town Manager  
P. Brown, Finance Director  
A. Greenleaf, WWTP Supt.  
Tracy Wood, P.E., NHDES (WWEB, PO Box 95, Concord, NH 03302-0095)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

Boston, MA 02109-3912

OCT - 3 2012

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

Larry Wiggins  
Public Works Director  
Town of Newport  
15 Sunapee Street, Suite 1  
Newport, NH 03773-1497

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Mr. Wiggins:

Thank you for your September 13, 2012 letter advising EPA that Newport's Phosphorus Removal Wastewater Treatment Facility ("WWTF") Upgrade has been delayed. You wrote that Penta Corporation informed the Town during a September 4, 2012 WWTF Upgrade project meeting that substantial completion of the WWTF Upgrade project would not be achieved by October 31, 2012 because the pre-engineered building had not been fabricated and delivered on schedule. In your letter, you requested an extension of the October 31, 2012 Administrative Order ("Order") deadline to December 31, 2012 for completing the WWTF Upgrade and achieving compliance with the total phosphorus limits.

By this letter, the major milestones set forth below are incorporated into the Order and enforceable pursuant to Paragraphs III.1.c. and III.3.b. of the Order. The major milestone deadlines are as follows:

**Supplemental Order Schedule**

- **By December 31, 2012**, Newport shall achieve compliance with the phosphorus limits contained in the NPDES Permit, shall conduct quarterly WET limits compliance monitoring as required by the Town's NPDES Permit, and, for one year, will provide quarterly effluent toxicity evaluations in addition to the requisite full bioassay report by the last day of the month following the WET test calendar quarter (i.e. by January 31, 2013; April 30, 2013; July 31, 2013; and October 31, 2013).

- **By November 30, 2013**, Newport shall have completed one year of WET monitoring including quarterly evaluations, and if full NPDES Permit compliance was achieved, Newport shall submit to EPA and NHDES a letter report of its findings. If the one-year period of compliance monitoring demonstrates that the Phosphorus Removal WWTF Upgrade did not also achieve compliance with the WET limits of the NPDES Permit, Newport shall instead submit to EPA and NHDES a detailed engineering report that recommends additional long-term corrective measures and a schedule to comply with the WET limits of the NPDES Permit.

Please telephone Joy Hilton of my staff at (617) 918-1877 or have your attorney contact Michael Wagner at (617) 918-1735 if you have any questions.

Sincerely,



Susan Studlien, Director  
Office of Environmental Stewardship

cc: Tracy L. Wood, NHDES  
Norma Mason, EPA



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Region 1  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912**

**APR - 5 2012**

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Larry Wiggins  
Public Works Director  
Town of Newport  
15 Sunapee Street, Suite 1  
Newport, NH 03773-1497

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Mr. Wiggins:

Thank you for your March 6, 2012 letter advising EPA that NHDES had reviewed Newport's Phosphorus Removal Wastewater Treatment Facility ("WWTF") Upgrade design and its application for Clean Water State Revolving Loan ("CWSRF") funds. More specifically you reported that, because the NHDES "remains unconvinced that surface mixers will affect the desired toxicity reduction...", the NHDES was "disinclined to commit limited CWSRF funds toward their purchase."

Based on the information provided in your letter, EPA proposes to revise the Facilities Plan Implementation Schedule and the Corrective Action Plan Schedule incorporated into Administrative Order Docket No. 09-015 ("Order" or "AO") to allow phased WWTF project implementation with respect to achieving compliance with the Whole Effluent Toxicity ("WET") limits contained in the Town's NPDES Permit. The October 31, 2012 deadline for completing the WWTF Upgrade and achieving compliance with the total phosphorus limits will remain unchanged. After completing the WWTF Upgrade, the revised Supplemental Order Schedule will require a one-year period of Permit compliance monitoring with quarterly WET data evaluations/reports, a deadline for submission of a letter report reporting the results of compliance monitoring and, if necessary, a revised corrective action plan for achieving compliance with the WET limits of the NPDES Permit.

By this letter, the major milestones set forth below are incorporated into the Order and enforceable pursuant to Paragraphs III.1.c. and III.3.b. of the Order. The major milestone deadlines are as follows:

### Supplemental Order Schedule

- **By October 31, 2012**, Newport shall achieve compliance with the phosphorus limits contained in the NPDES Permit, shall conduct quarterly WET limits compliance monitoring as required by the Town's NPDES Permit, and, for one year, will provide quarterly effluent toxicity evaluations in addition to the requisite full bioassay report by the last day of the month following the WET test calendar quarter (i.e. by January 31, 2013; April 30, 2013; July 31, 2013; and October 31, 2013).
- **By November 30, 2013**, Newport shall have completed one year of WET monitoring including quarterly evaluations, and if full NPDES Permit compliance was achieved, Newport shall submit to EPA and NHDES a letter report of its findings. If the one-year period of compliance monitoring demonstrates that the Phosphorus Removal WWTF Upgrade did not also achieve compliance with the WET limits of the NPDES Permit, Newport shall also submit to EPA and NHDES a detailed engineering report that recommends long-term corrective measures and a schedule to comply with the WET limits of the NPDES Permit.

Please telephone Joy Hilton of my staff at (617) 918-1877 or have your attorney contact Michael Wagner at (617) 918-1735 if you have any questions.

Sincerely,

*Susan Studlien*

Susan Studlien, Director  
Office of Environmental Stewardship

cc: Tracy L. Wood, NHDES  
Norma Mason, EPA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

Boston, MA 02109-3912

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

**JUN 16 2011**

Larry Wiggins  
Public Works Director  
Town of Newport  
15 Sunapee Street, Suite 1  
Newport, NH 03773-1497

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Mr. Wiggins:

The Town's May 18, 2011 letter indicated to EPA that its Phosphorus Removal Upgrade project will not be operational and achieving full NPDES Permit compliance by October 31, 2012 as required by the AO. **Within 14 days** of your receipt of this letter, please clarify whether it is feasible for Newport to expedite construction and start-up to comply with the October 31, 2012 AO deadline, include a description of any factors that explain the delay, and propose a date by which Newport's Phosphorus Upgrade will achieve full NPDES Permit compliance.

If you have any questions, please feel free to contact Joy Hilton of my staff at 617-918-1877.

Sincerely,

A handwritten signature in dark ink, appearing to read "Denny Dart", is written over the typed name.

Denny Dart, Manager  
Water Technical Unit

cc: Tracy Wood, NHDES



U.S. Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

COMBINED ROUTING AND CONCURRENCE SLIP  
DATE

RE: Newport NH NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

ROUTING TO:

	Name	Initials	Date
1.	Joy Hilton (SEW)	JH	6/8/11
2.	Mike Fedak (SEW)	MF	6/10/11
3.	Michael Wagner (SEL)	MW	6/10/11
4.	Denny Dart (SEW)	DD	6/16/11
5.	Wanda Williams (SEW)		
	Please date, copy and mail.		

CONCURRENCE:

The signature above signifies concurrence with the following documents:

Letter re: WWTF Upgrade

REMARKS:

Newport's NPDES Permit was reissued on April 18, 2007, became effective on July 1, 2007, and is set to expire on June 30, 2012. The permit includes new stringent effluent limitations for total phosphorus. The Order addresses the documented phosphorus, and acute and chronic whole effluent toxicity limits violations, and the AO requires the Town to achieve full NPDES permit compliance by no later than October 31, 2012.

This is a **second** letter concerning the WWTF upgrade project and schedule.

Please Return to:

Name	Phone Number
Joy Hilton (SEW)	1877

Done  
mailed  
6/16/11  
(w)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 1**  
**5 Post Office Square, Suite 100**  
**Boston, MA 02109-3912**

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

**MAY - 4 2011**

Larry Wiggins  
Public Works Director  
Town of Newport  
15 Sunapee Street, Suite 1  
Newport, NH 03773-1497

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Mr. Wiggins:

EPA recently received a copy of your April 12, 2011 letter to NHDES regarding the contract proposals for the wastewater treatment facility ("WWTF") \$2,971,458 Phosphorus Removal Upgrade project. Among other things, your letter indicated to NHDES that the new UV system and some other WWTF improvements originally planned would be delayed for financial reasons. You also advised NHDES that Newport understood that its earlier submittals under the Administrative Order Docket No. 09-015 ("AO" or "Order") concerning whole effluent toxicity ("WET") and infiltration and inflow ("I/I") issues were sufficient since there had been no correspondence from EPA. The letter also included a project design and construction schedule which indicated that filter building construction completion and startup would occur by October 22, 2012.

As you know, EPA issued the Order to Newport for WWTF discharges in violation of the total phosphorus concentration limits and the acute and chronic WET limitations contained in the Town's NPDES Permit. The AO required the Town to, by December 31, 2009, prepare and submit a facilities plan evaluating the necessary upgrade of the WWTF including a proposed schedule for achieving compliance with the effluent limits of the NPDES Permit by October 31, 2012. The AO also required the facilities plan to include an evaluation of extraneous flows that enter the Town's collection system during wet weather to address capacity issues. The Order required the Town to submit a detailed engineering report by December 31, 2009 evaluating the WET test data and recommending short-term and long-term corrective measures and a proposed schedule to eliminate violations of the WET limits of the NPDES Permit. The Facilities Plan

implementation schedule would be incorporated into the Order and enforceable as approved by, and as amended by EPA.

EPA and NHDES received and reviewed the January 28, 2010 *Evaluation of Phosphorus Removal Alternatives, Wastewater Treatment Facility, Newport, New Hampshire* ("2010 Report") prepared and submitted by AECOM on Newport's behalf. To achieve full NPDES Permit compliance by October 31, 2012, the 2010 Report recommended a \$5,238,000 WWTF upgrade project including: (1) the addition of a phosphorus treatment system (i.e., coagulation followed by filtration with a cloth media filter); (2) improvements to the existing WWTF (originally constructed in the 1960s with the last major upgrade made in the late 1980s); and (3) short-term corrective measures including sludge removal from WWTF lagoons and adding mixers to achieve compliance with the WET limits (with more evaluation needed to develop a long-term corrective action plan). The 2010 Report also recommended that the Town continue its efforts to reduce I/I.

Based on your April 12, 2011 letter, EPA has the following questions and requests a response **within 14 days** of your receipt of this letter:

- Does Newport's \$2,971,458 Phosphorus Removal Upgrade project include improvements to the existing WWTF such as sludge removal and new mixers to achieve compliance with the WET limits contained in the NPDES Permit? For clarification, please provide a side-by-side comparison of the \$5,238,000 WWTF upgrade project recommended by AECOM and the \$2,971,458 Phosphorus Removal Upgrade project discussed in your April 12, 2011 letter to NHDES.
- Newport's proposed schedule for the Phosphorus Removal Upgrade project indicates that construction will be completed by October 22, 2012, followed by a plant start-up period. Is it feasible for Newport to complete construction and plant start-up sooner and achieve full NPDES Permit compliance by October 31, 2012 as required by the AO?
- What activities are underway or planned, including any studies, for reducing I/I in Newport?

If you have any questions, please feel free to contact Joy Hilton of my staff at 617-918-1877.

Sincerely,



Denny Dart, Manager  
Water Technical Unit

cc: Tracy Wood, NHDES



U.S. Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

COMBINED ROUTING AND CONCURRENCE SLIP  
DATE

RE: Newport NH NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

*Done*  
*5/4/11*

ROUTING TO:

	Name	Initials	Date
1.	Joy Hilton (SEW)	<i>JH</i>	<i>5/2/11</i>
2.	Mike Fedak (SEW)		
3.	Michael Wagner (SEL)	<i>MW</i>	<i>5/2/11</i>
4.	Denny Dart (SEW)		
5.	Wanda Williams (SEW) Please date, copy and mail.	<i>WW</i>	<i>5/4/11</i>

CONCURRENCE:

The signature above signifies concurrence with the following documents:

Letter re: WWTF Upgrade

REMARKS:

Newport's NPDES Permit was reissued on April 18, 2007, became effective on July 1, 2007, and is set to expire on June 30, 2012. The permit includes new stringent effluent limitations for total phosphorus. The Order addresses the documented phosphorus, and acute and chronic whole effluent toxicity limits violations, and the AO requires the Town to achieve full NPDES permit compliance by no later than October 31, 2012.

This is a letter concerning the WWTF upgrade project and schedule.

Please Return to:

Name	Phone Number
Joy Hilton (SEW)	1877



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

AUG 13 2009

Daniel O'Neill, Manager  
Town of Newport  
15 Sunapee Street  
Newport, NH 03773

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Mr. O'Neill:

We have received and reviewed the Town's July 23, 2009 request for extension of the December 31, 2009 compliance schedule deadline set forth in EPA Administrative Order Docket No. 09-015. The Administrative Order requires the Town to upgrade its wastewater treatment facility to comply with the requirements of its NPDES permit by October 31, 2012. The Town's letter requested a one-month extension for submitting the facilities plan in order to: (1) perform pilot testing in late October/early November, a critical time of the year based on historic data; (2) have time to compile and evaluate pilot testing data; and (3) prepare the report. The Town indicated that it would execute the contract with the consulting firm after receiving the deadline extension approval from EPA.

EPA acknowledges that the Town needs another month to complete facilities planning and that the October 31, 2012 Order deadline for achieving full compliance with the NPDES Permit will not be affected.

If you have questions, please contact Joy Hilton of my staff with any questions that you may have regarding the terms and conditions of the Order. She can be reached at (617) 918-1877.

Sincerely,

*for* Denny Dart, Manager  
Water Technical Unit

cc: Tracy L. Wood, P.E., NHDES  
Larry A. Wiggins, P.E., Public Works Director, Newport, NH  
Arnold Greenleaf, WWTF Superintendent, Newport, NH



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

MAR 06 2009

Daniel O'Neill, Manager  
Town of Newport  
15 Sunapee Street  
Newport, NH 03773

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015

Dear Mr. O'Neill:

Enclosed is an Administrative Order ("Order" or "AO") issued to the Town of Newport ("Town" or "Newport") for violations of the effluent limits contained in NPDES Permit No. NH0100200 ("NPDES Permit"). The Order specifically cites violations of the total phosphorus concentration limits contained in the Town's NPDES Permit as well as discharges of wastewater that violated the acute and chronic whole effluent toxicity ("WET") limitations.

Since July 1, 2007, Newport's wastewater treatment facility ("WWTF") has discharged total phosphorus in excess of the effluent limits contained in the NPDES Permit. These violations will continue unless modifications are made to the WWTF. We are aware of the difficult and complex issues that confront the Town. It is however, EPA's responsibility to ensure that municipalities achieve compliance with their NPDES permits as soon as practicable. Given the continued violations of your NPDES permit, the Town must act now to resolve its wastewater treatment problems.

Towards that end, EPA's Administrative Order requires that by December 31, 2009 the Town complete and submit a facilities plan that evaluates the upgrade of the WWTF. The facilities plan shall include recommendations and a proposed schedule for achieving compliance with the NPDES Permit by October 31, 2012. The design and construction schedule for the selected alternative, as approved by EPA, will be incorporated into the AO and enforceable thereunder. The Order includes interim limits for specific parameters that are effective from the date of the Town's receipt of the Order until the earliest of: (1) the date that the WWTF's improvements are fully operational; (2) October 31, 2012; or (3) EPA determines that the Town has not complied with the interim AO milestones.

Toll Free • 1-888-372-7341

Internet Address (URL) • <http://www.epa.gov/region1>

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The Order also requires the Town to submit a detailed report evaluating the WET test data and recommending corrective measures to eliminate violations of the WET limits of the NPDES Permit. Finally, the Order requires Newport to submit quarterly compliance status updates until it achieves compliance with its NPDES Permit limits.

Violation of the Order may subject the Town to further enforcement under Section 309 of the Clean Water Act, in which injunctive relief and penalties may be sought. Please contact Joy Hilton of my staff regarding any questions that you may have regarding the terms and conditions of the Order. She can be reached at (617) 918-1877.

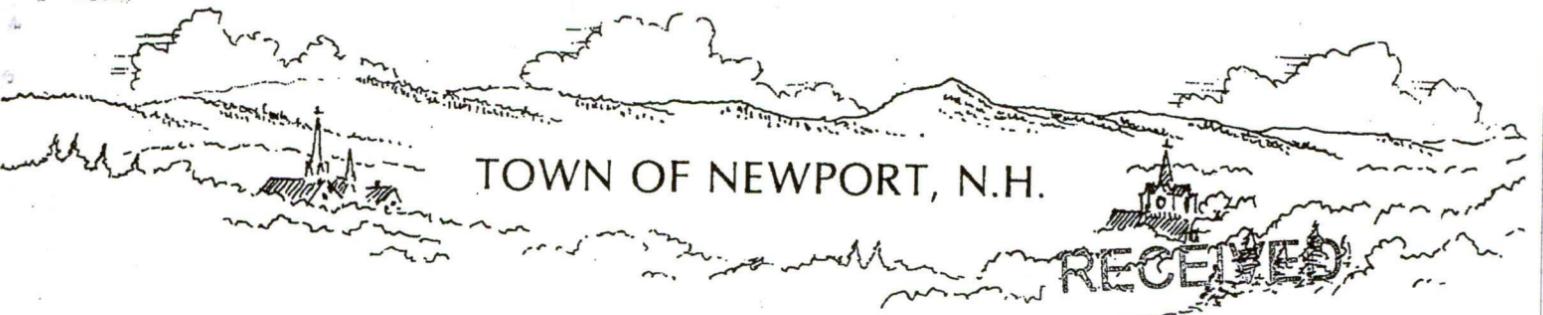
Sincerely,

*Susan Studlien*

Susan Studlien, Director  
Office of Environmental Stewardship

Enclosure

cc: Tracy L. Wood, P.E., NHDES  
Larry A. Wiggins, P.E., Public Works Director, Newport, NH  
Arnold Greenleaf, WWTF Superintendent, Newport, NH



TOWN OF NEWPORT, N.H.

RECEIVED

April 12, 2011

APR 18 2011

DES-WEB

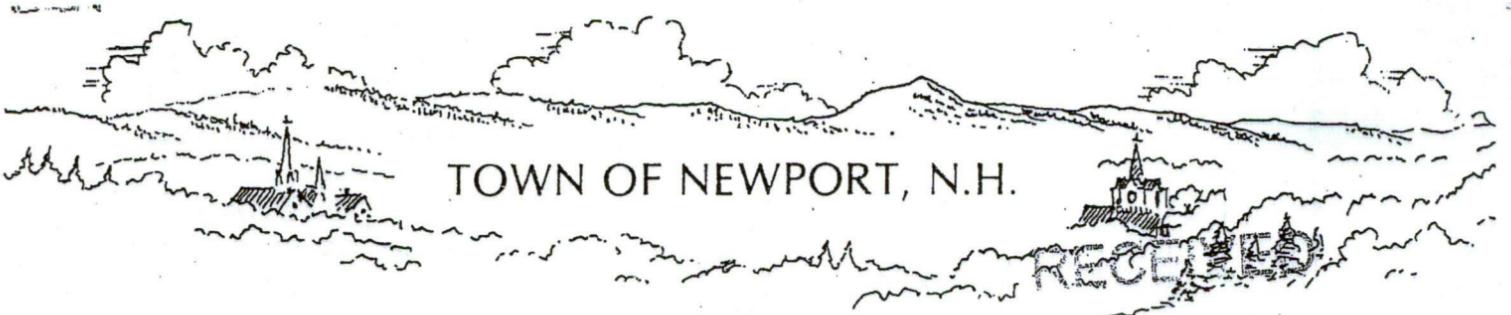
Mr. Paul Heirtzler, Adm.  
NH Dept. of Environmental Services  
P.O. Box 95  
Concord, NH 03302-0095

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Newport WWTP Phosphorous Removal Upgrade Engineering Contracts

Dear Mr. Heirtzler,

I have concluded my negotiations with AECOM and am forwarding the contract proposals to you for review and comment. Some basic information for your consideration is as follows:

1. The contracts are for the Preliminary and Final Design. The Town decided to separate them hoping to secure some grant funding by the time the Final Design contract had to be signed (therefore including some of the design in the grant). The Construction contract is still in the negotiations phase.
2. When the Town was informed it was ineligible for a Rural Development grant, it was decided to contract for only the phosphorous removal system. The Town would delay the new UV system and some other WWTP upgrades due to financial constraints. Having not heard from the EPA, we understand we have met the other issues of the AO, ie. the wet toxicity, I&I issues, etc. with our previous submittals.
3. AECOM's proposal is to design a filter building (pre-engineered and approximately 40' x 55') to house the filters, contact chambers, pumps and chemical feed system. The sludge is then pumped to a sludge storage tank in the existing WWTP (heated area). From there the sludge is either pumped to the existing geotube storage area, or in emergency shutdown, pumped to the lagoons/grit building. The treated effluent is routed to the existing UV system.



TOWN OF NEWPORT, N.H.

RECEIVED

APR 18 2011

DES-WEB

April 12, 2011

Mr. Paul Heirtzler, Adm.  
NH Dept. of Environmental Services  
P.O. Box 95  
Concord, NH 03302-0095

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Newport WWTP Phosphorous Removal Upgrade Engineering Contracts

Dear Mr. Heirtzler,

I have concluded my negotiations with AECOM and am forwarding the contract proposals to you for review and comment. Some basic information for your consideration is as follows:

1. The contracts are for the Preliminary and Final Design. The Town decided to separate them hoping to secure some grant funding by the time the Final Design contract had to be signed (therefore including some of the design in the grant). The Construction contract is still in the negotiations phase.

2. When the Town was informed it was ineligible for a Rural Development grant, it was decided to contract for only the phosphorous removal system. The Town would delay the new UV system and some other WWTP upgrades due to financial constraints. Having not heard from the EPA, we understand we have met the other issues of the AO, ie. the wet toxicity, I&I issues, etc. with our previous submittals.

3. AECOM's proposal is to design a filter building (pre-engineered and approximately 40' x 55') to house the filters, contact chambers, pumps and chemical feed system. The sludge is then pumped to a sludge storage tank in the existing WWTP (heated area). From there the sludge is either pumped to the existing geotube storage area, or in emergency shutdown, pumped to the lagoons/grit building. The treated effluent is routed to the existing UV system.

identified & addressed. p. 3-4 of 1/2010 AECOM Report

Flow: 38  
NO AVG 0.5 → 1.05 MGD  
DAILY MX 0.5 → 1.6 MGD

Pockets of excessive I/I that should be capacity issues must be addressed there is excessive I/I

by data review - ammonia toxicity in July-Sept quarters -

1.04 for  
3 consec. mos.

4. In the end of January 2011, AECOM presented a construction estimate for the above as follows:

- a. Construction \$1,869,441
- b. Contingency \$ 467,360 (25%)
- c. Engineering \$ 580,000
- Total \$2,971,458 (with 2.3% inflation for 2012 dollars)

5. The Preliminary design fee is proposed at \$134,000. The Final Design fee is proposed at \$139,510. Total design is \$273,510 with meetings in Newport extra. AECOM's tentative proposed fee for construction is \$221,000 (time & material basis) with the Town performing a majority of the resident engineering.

We would appreciate your review and comment on the proposed contracts. As it stands now AECOM's proposed start date is May 1, 2011.

Thank you for your assistance.

Regards,



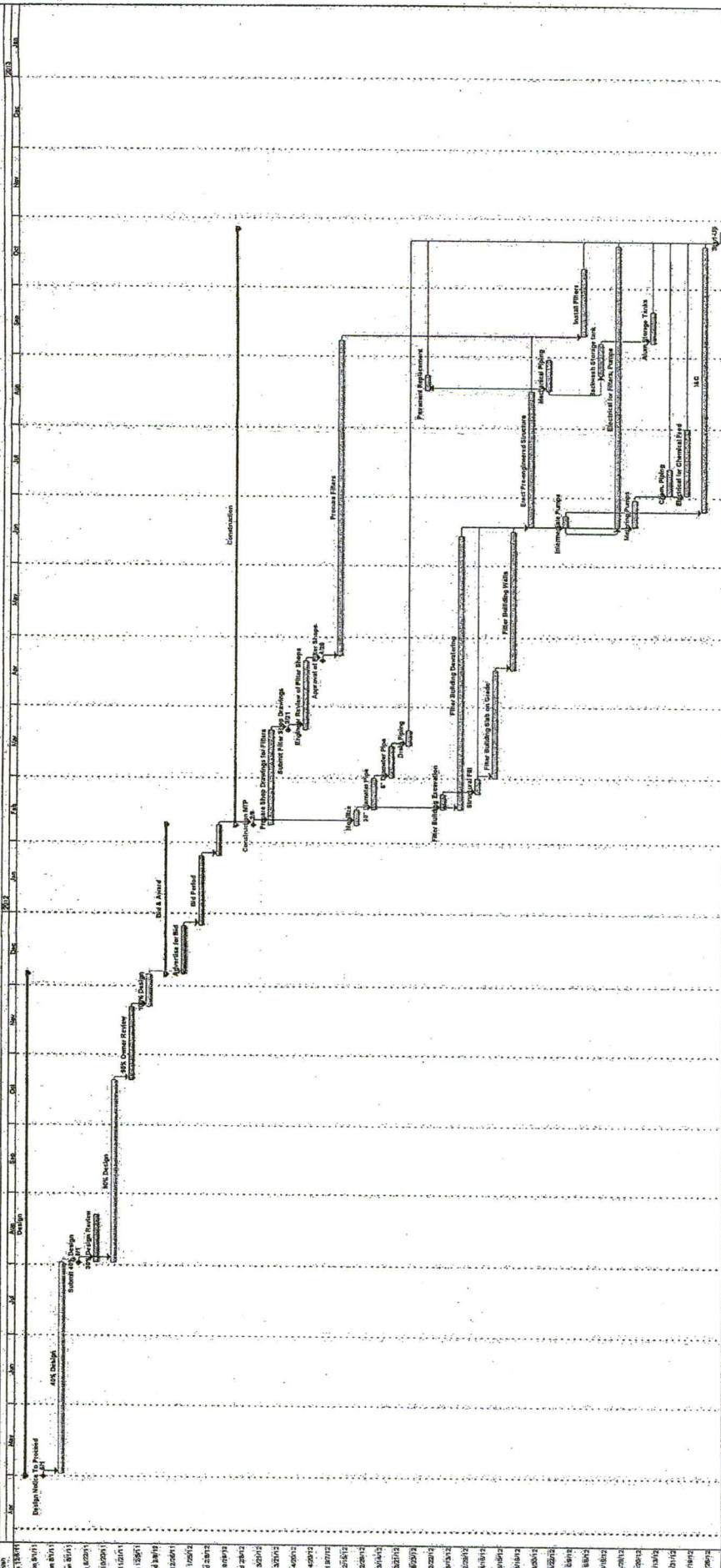
Larry Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

cc: Tracy Wood, P.E., NHDES (w/ encl)  
P. Brown, Finance Director (w/ encl)  
A. Greenleaf, Wastewater Treatment Plant Supt. (w/o encl)

RECEIVED  
APR 18 2011  
DES-WEB

# Newport, New Hampshire Filter Building Preliminary Design & Construction Schedule



112 STARTUP



# TOWN OF NEWPORT, N.H.

May 18, 2011

Ms. Denny Dart, Manager  
Water Technical Unit  
U.S. Environmental Protection Agency  
Region 1  
5 Post Office Sq., Suite 100  
Boston, MA 02109

MAY 18 2011

Re: NPDES Permit No. NH0100200  
Administrative Order Docket No. 09-015  
Town of Newport Wastewater Treatment Plant Upgrade  
For Phosphorus Removal

Dear Ms. Dart:

The Town of Newport has received your letter of May 4, 2011 referencing the Town of Newport's April 12, 2011 Quarterly Report on the Town of Newport's Wastewater Treatment Plant Upgrade for Phosphorus Removal. In your letter, you requested the Town's response to questions raised in your letter. Please find the Town's response as follows:

1. *Does Newport's \$2,971,458 Phosphorus Removal Upgrade project include improvements to the existing WWTF such as sludge removal and new mixers to achieve compliance with the WET limits contained in the NHDES Permit? For clarification, please provide a side-by-side comparison of the \$5,238,000 WWTF upgrade project recommended by AECOM and the \$2,971,458 Phosphorus Removal Upgrade project discussed in your April 12, 2011 letter to NHDES.*

**Town of Newport Response:** With regard to sludge removal, the Town's Phosphorus Removal Upgrade does include improvements to the existing geotube sludge disposal facility. The improvements include building a structure over the geotubes for environmental issues and improvements to allow full geotube bags to be utilized. The coagulation followed by filtration with cloth media filter system will pump the sludge to the improved geotube facility. The Town intends to build these improvements with in-house engineering and construction. The Town has removed and disposed of sludge in the following quantities: 2005: 170 tons; 2006: 168 tons; 2008: 65 tons; 2009: 126.5 tons; 2010: 80 tons (estimated - removed from lagoons, but still onsite). Sludge removal will continue as a standard part of the operations of the plant.

With regard to new mixers to achieve compliance with the WET limits, AECOM's evaluation in the Phosphorus Removal Alternative Study qualifies the mixer installation suggestion by stating "It is important to note here that the data supporting this conclusion is limited and that further evaluation and testing would be suggested to corroborate its conclusion before significant capital investment is made." To that end, the Town has directed its testing laboratory to perform some additional testing, specifically the toxicity identify evaluation (TIE) testing to perhaps allow a more specific analysis of the actual cause of ammonia issues.

Lastly, please find a side-by-side comparison of the projects as requested as follows:

**AECOM Recommended \$5,238,000 Wastewater Treatment Facility Upgrade**

1. Coagulation followed by filtration with a cloth media filter system
2. Influent pumping
3. All-weather building covering all equipment
4. Electrical and instrumentation system upgrades and updates
5. Geotube Sludge Handling Structure Improvements
6. Future UV system structural and electrical provisions inside Filter Building
7. Sludge storage included inside Filter Building

**Phosphorus Removal Upgrade Project (\$2,971,458) presented in April 12, 2011 Letter**

1. Coagulation followed by filtration with a cloth media filter system
2. Influent pumping
3. All-weather building covering all equipment
4. Geotube sludge handling structure improvements - Town Constructs
5. Electrical and instrumentation systems upgrades and updates
6. Provisions for future UV structure and electrical provided, but not in the Filter Building and as a future project
7. Sludge storage included in existing Control Building

Both project costs have improvements to the sludge handling facility (geotube area) however the \$2,971,458 project has the improvements completed by the Town. This reduces the engineering and construction costs. The remaining numerical difference in costs is the result of refinements in conceptual engineering, location of the Filter Building reduction in building footprint and depth, contingencies and engineering fees between those used in AECOM's study and those of my letter of April 12, 2011.

2. *Newport's proposed schedule for the Phosphorus Removal Upgrade project indicates that construction will be completed by October 22, 2012, followed by a plant start-up period. Is it feasible for Newport to complete construction and plant start-up sooner and achieve full NPDES Permit compliance by October 31, 2012 as required by the AO?*

**Town of Newport Response:** Please find enclosed a schedule as prepared by AECOM titled Filter Building and Preliminary Design and Construction Schedule.

3. *What activities are underway or planned, including any studies, for reducing I/I in Newport?*

**Town of Newport Response:** As stated in my letter to Ms. Susan Studien on April 2, 2009 (reference letter included in AECOM's "Evaluation of Phosphorus Removal Alternatives" study, the Town of Newport has completed significant infrastructure improvements with regard to the existing sewer system. (Please reference chart developed by Water & Sewer Superintendent Robert Naylor dated March 31, 2009 (also included in study) listing the sewer system infrastructure improvements between 1993 and 2007.) The accumulative effect of these improvements is demonstrated in the enclosed chart titled Average Annual Flow vs. Total Rainfall for the Last 18 Years at the (Newport) WWTF as updated by WWTF Superintendent Arnold Greenleaf. This chart clearly shows the infiltration/inflow has been reduced.

The Town's future plans are to address the additional improvements as identified in AECOM's Alternative Study, Table 6-5. Once these improvements are completed, the Town has targeted the First, Second, Third and Fourth Street area as the next major infrastructure improvement project.

The Town's responses reflect the Town's understanding of the material presented in AECOM's "Evaluation of Phosphorus Removal Alternatives, Wastewater Treatment Facility, Newport, NH". The Town is reviewing this letter with AECOM.

I trust the above responses adequately address the issues raised in your letter.

Respectfully,



Larry A. Wiggins, P.E.  
Public Works Director  
Town of Newport, NH

LAW/jas

cc: Paul Brown, Interim Town Manager (w/ encl)  
Arnold Greenleaf, Wastewater Treatment Plant Superintendent (w/ encl)  
Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095) (w/ encl)  
Dennis Setzko, AECOM Technical Services (200 Enterprise Drive, Suite 1A, Rocky Hill, CT 06067) (w/ encl)

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EXPRESS MAIL: E F 3 9 0 6 1 3 2 7 1 U S

**AVERAGED ANNUAL FLOW VS. TOTAL RAINFALL FOR THE LAST 18 YEARS AT THE WWTF.**